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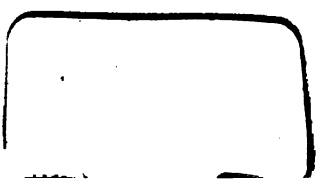

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MUNICIPAL AFFAIRS.

A QUARTERLY MAGAZINE

DEVOTED TO

THE CONSIDERATION OF CITY PROBLEMS

FROM THE STANDPOINT OF THE

TAXPAYER AND CITIZEN.

VOLUME I, 1897

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ANNOUNCEMENT.

The "Civic Renaissance," as the recent widespread revival of interest in municipal affairs has been aptly termed, is not confined in its expression to practical politics. The best work in many ways that it has yet accomplished has been educational in its nature. A number of able volumes have been added to the literature of the subject within the last few years, while the current issues of our great magazines and reviews contain valuable contributions that reach multitudes of readers. Specialization however has not yet proceeded so far as to produce a large periodical entirely devoted to the consideration of city problems from the standpoint of the taxpayer and citizen. With the present issue of MUNICIPAL AFFAIRS the Committee on Municipal Administration of the Reform Club begins the publication of such a journal to appear at quarterly intervals. Each issue will contain one or more extensive studies of some phase of municipal government by recognized authorities. Shorter articles dealing with questions of immediate interest, book reviews and other departments suggested by the needs of the time will supplement the more extended studies.

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The present number is devoted entirely to an extensive "Bibliography of Municipal Administration and City Conditions" by Mr. Robert C. Brooks.

The subscription price is one dollar ($1.00) per calendar year, in advance. Single numbers 25 cents each.

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A BIBLIOGRAPHY OF MUNICIPAL ADMINISTRATION

AND CITY CONDITIONS.

"Knowledge is of two kinds. We know a subject ourselves or we know where we can find information upon it. When we enquire into any subject, the first thing we have to do is to know what books have treated of it."—SAMUEL JOHNSON.

The whole body of literature on the general subject of Municipal Administration and City Conditions is already extensive and is increasing with a rapidity which is sufficient evidence of a great and growing public interest. But being scattered through scores of periodicals and hundreds of volumes, which for the most part devote a comparatively small portion of their space to distinctively municipal problems, the task of finding what has been published on any given subject is difficult and tedious. It is with the hope that access to such literature may be made more easy for the great numbers of those interested in the problems of cities that the following Bibliography of Municipal Administration and City Conditions has been prepared.

The Bibliography consists of a Subject Index and an Author List. In the first the references are arranged alphabetically, either separately or under general topics. In the author list the names of authors are given in alphabetical order, the titles of the works of each being given in chronological order under his name. References to periodical literature are made generally by volume and page numbers. The abbreviations are the same as those used in Poole and in the Annual Literary Indexes. No attempt has been made to include publications of 1897. A list of the magazines to which more frequent references are made will be found at page

v, and a list of the principal topics of the subject list at page vii. The prices of books quoted have been taken from the Annual Publisher's Catalogues. Purchasers for libraries or in quantities can generally obtain reductions, ranging from 10 to 33 1/3 per cent.

As to the scope of the bibliography, while recognizing the necessary limitations of a work of this sort, an attempt has been made to include the books, pamphlets and periodical literature of the United States, Great Britain, Germany, France, Italy, Austria and Spain. The students of municipal affairs in this country have long recognized the great value of a thorough acquaintance with the experience of British and Continental Cities in solving the same problems, and for that reason references to foreign literature have been made as complete as possible. At the same time no trouble has been spared to include all relevant American publications, even to the smallest pamphlets. The more important federal and state documents containing material useful to the student of city government and conditions have been thoroughly indexed. Formal accounts and routine reports of cities and reform organizations have not been included except in cases where specially important matter justifies mention. Care has been taken to refer under the proper heading to separate chapters or sections on important subjects not indicated in the general titles of books, pamphlets and magazine articles.

Altogether, this bibliography contains some 6,000 entries. In the author list 2,300 separate titles are arranged under the names of 1,400 different authors, 1,900 of the titles are in the English Language (about one-fourth of them being British) 150 in French, 120 in German, 80 in Italian and 50 in Spanish. In addition to repeating all the titles contained in the author list under one and sometimes under two or three topical headings the subject list also contains references to 1,000 anonymous works.

The Committee acknowledges its indebtedness to the many who have so freely given their assistance in making the present work as complete as possible.

NEW YORK, Feb. 1st, 1897.

PERIODICALS AND ABBREVIATIONS.

American Architect, Boston	Am. Arch.
American Economic Association Publications, Baltimore, Md	Am. Econ. Assoc.
American Gas Light Journal, New York	Am. Gas Light J.
(American) Journal of Social Science, Boston	Am. J. Soc. Sci.
American Journal of Sociology, Chicago	Am. J. Sociol.
American Law Review, St. Louis, Mo	Am. Law R.
American Magazine of Civics, New York	Am. M. Civics.
American Statistical Association Publications, Boston	Am. Statis. Assoc.
Andover Review, Boston	Andover R.
Annals of the American Academy of Political and Social Science, Philadelphia	Ann. Am. Acad. Pol. Sci.
Architectural Record, New York	Arch. Rec.
Architectural Review, Boston	Arch. Rev.
Architecture and Building, New York	Arch. & Buil.
Arena, Boston	Arena.
Atlantic Monthly, Boston	Atlan.
Banker's Magazine, New York	Bank. M. (N. Y.)
Blackwood's Magazine, Edinburgh	Blackw.
Century, New York	Cent.
Charities Review, New York	Char. R.
Chautauquan, Meadville, Pa	Chaut.
City Government, New York	City Govt.
Contemporary Review, London	Contemp.
Cosmopolitan, New York	Cosmopol.
Dublin Review, London	Dub. R.
Eclectic Magazine, New York	Ecl. M.
Economic Journal, London	Econ. J.
Economic Review, London	Econ. R.
Edinburgh Review, Edinburgh	Ed. R.
Educational Review, New York	Educa. R.
Electrical Engineer, New York	Elec. Eng.
Electrical Review, New York	Elec. Rev.
Electrical World, New York	Elec. World.
Engineering Magazine, New York	Engin. M.
Engineering News, New York	Engin. News.
Engineering Record, New York	Engin. Rec.
Fire and Water, New York	Fire and Water.
Fortnightly Review, London	Fortn.
Forum, New York	Forum.
Garden and Forest, New York	Garden & F.
Good Government, Washington, D. C	Good Govt.
Harper's Magazine, New York	Harper.
Harper's Weekly, New York	Hrprs. Wkly.
International Review, New York	Internat. R.
Johns Hopkins University Studies in History, etc., Baltimore, Maryland	J. H. Univ. Studies.

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NEW YORK CITY SHOULD OWN THE GAS SUPPLY.

BY EDWARD M. GROUT.

In its last analysis the proposition that the city of New York should own and operate the gas supply system for its streets and for its inhabitants is purely a business proposition.

The city is two-sided. It is first a public corporation, a governmental subdivision of the state. Of that subdivision we are citizens, and to it we look for local administration of the means for the protection of life, liberty and property, and for no more. So much only is purely governmental. Of that side of the municipal functions it remains true as of all government, that the best is that which governs least.

THE CITY A PRIVATE BUSINESS CORPORATION ALSO.

But the city is also a moneyed business corporation in which every resident is a shareholder. The citizen is interested in the business matters of his city in a manner and in a degree similar to the interest of the stockholder in a private company; its losses injure him, its gains benefit him. And it is as a business corporation that the city owns and manages so much property and so many business enterprises; and for the purely business reason that it can do so, all things considered, better than the citizen can do such things for himself, or can hire them done for him by private corporations. Thus New York city builds and manages bridges and a railroad system over one of them; it is about to build a great street transportation system; it paves, lights, cleans

and sewers the streets; it removes ashes and garbage; it owns docks and ferries, markets, parks, museums, the aquarium; and it has constructed and manages one of the most excellent and extensive water supply systems of the world. The power and right of the municipality to do these things have been questioned in few instances, and are here and now conceded or established. For the course of statutory enactment and of judicial approval, from the Dongan charter to the decision of the court of appeals two months ago, have been so uniform as to put the question of power and right to own or manage such enterprises, whether ferries or an underground tunnel, beyond the domain of possible dispute; and when a city exercises such power and right it does so as a private, rather than as a public corporation. *

Expediency, that is, the question whether or not the city can do better for itself and for its inhabitants than can private enterprise, is, in truth now the final inquiry, the controlling consideration, even with those who apparently have been devoted to the arguments against power and right. It has become such by in-

* As the court of appeals of this state said, speaking more than thirty years ago of "the rights of municipal corporations to property in lands and its usual incidents, and to create and establish ferries and railroad franchises," such "rights are property in the ordinary sense, to be acquired and conveyed in the same manner as natural persons acquire and transfer property." So Judge Dillon said, in 1881, concerning the distinction between the public and private powers and functions of municipalities: "On principle, perhaps, the following may be regarded as the true view. As respects the usual and ordinary legislative and governmental powers conferred upon a municipality, the better to enable it to aid the state in properly governing that portion of its people residing within the municipality, such powers are in their very nature public. * * * *But powers and franchises of an exceptional and extraordinary nature may be, and sometimes are, conferred upon municipalities, such as are frequently conferred upon individuals or private corporations. Thus, for example, a city may be expressly authorized in its discretion to erect a public wharf and charge tolls for its use, or to supply its inhabitants with water and gas, charging them therefor and making a profit thereby.* In one sense such powers are public in their nature, because conferred for the public advantage. In another sense they may be considered private, because they are such as may be and often are conferred upon individuals and private corporations and result in a special advantage or benefit to the municipality as distinct from the public at large." And in 1842 the courts of this state, following the English decisions, held that the city of New York, in the construction of its waterworks, was not performing a public governmental function, but was acting under "a special, private franchise, made as well for the private emolument and advantage of the city, as for the public good," and was to be "regarded as a private company, like any other body of men upon whom special franchises have been conferred for their own private advantage—such as banking and railroad corporations."

evitable progress of events. That New York newspaper* which carried clear to the court of appeals a three years' contest against the constitutionality of the act authorizing the city to construct the rapid transit tunnel astounded the advocates of municipal ownership, the very week of the final decision which sustained the law, by urging the re-purchase by the city of the Sixth and Eighth avenue railroad franchises, with the plants in use, because, by such re-purchase, and by letting out the franchises and plants, the city could secure a large profit. Therefore, let the people of New York once clearly understand that under municipal ownership gas costs but $1.00 per thousand in Philadelphia (and ought to cost less), but 75 cents in Wheeling, and from 52 to 56, cents in Birmingham, Manchester, Edinburgh and Glasgow, and they will at once cease to be willing to pay private gas companies here the extortionate price of $1.25 per thousand feet.

THE ALTERNATIVES PRESENTED TO NEW YORK.

But while we thus irregularly and at the outset sum up the arguments for municipal ownership of the gas supply, sustaining its propriety by reference to municipal ownership of these other and similar municipal enterprises, especially of the water supply, and its expediency by the citation of gas prices in cities which own the works, much more is involved in any reasonably complete discussion. If New York is to adopt municipal ownership of gas, it must be as a choice between that and ownership by private corporations. That alternative system (we will now assume and later will demonstrate) must be in some manner regulated and supervised; and the state of New York, the legislators at Albany, the country members who burn oil, have thus far reserved these powers wholly to themselves. So far as such powers have heretofore been exercised, at least in the public eye, the state regulation and supervision of the private corporations which supply gas to the metropolis have consisted in these:

A provision for gas meter inspection, of which no one, except the companies and the inspectors, would ever learn except by reading a dusty law book;

A provision that the gas must be of certain candle power, but with no method prescribed for a test; and

* See editorial, N. Y. *Sun*, April 1, 1897.

A limitation of the price to $1.25 per thousand feet.

The first and second are absolutely dead letter laws; the third is undoubtedly a profitable investment for others than the gas companies, and was probably intended to be the source of mutual gain to legislators, lobbyists and corporations. It is a price which has been fixed arbitrarily, without reference to cost of production or to reasonable profit. It exceeds the price paid in Boston, in Chicago, in Philadelphia, in Cleveland, in St. Louis in Cincinnati, in Buffalo, in Pittsburg, in Detroit, in Milwaukee, or in any city of Great Britain. That stamps it as excessive. It is therefore the cause of occasional attack on the part of the overcharged consumers, attacks which however justifiable are never wholly successful. It is ever the ready and obvious excuse for raids by legislative "strikers." To maintain it is thus to maintain the lobby. So long as it is maintained the gas companies must be the gainers, in part, at least, by so much of the excessive receipts as they can save from lobbyist and striker. Surely, if one believe that such a thing as legislative corruption exists, and such belief, whether justified or not, is a part of the American political creed, legislative corruption finds its opportunity in this situation. It would be better, though we can find no justification in the history of the state and city for the hope, that this regulation and supervision or—what passes for such—should be surrendered by the state to the city. If that act of self sacrifice and impoverishment on the part of the country legislators should be performed, then regulation and supervision, to be effective, must obviously be far different from what they have been in the past; the capitalization of the companies, the quality and healthfulness of the gas, its pressure and illuminating power, the meter and the price, the cost of production and the net profits realized upon a proper investment, must all be under the official eye. The opportunity and the temptations of official corruption will by so much be multiplied, as the field is increased.

The choice afforded to New York, then, is whether to continue the present system of private ownership, as regulated or unregulated from Albany, with the hope that some day the city may attain the power to rule itself, may acquire the right adequately to regulate and to tax the city gas companies, may be able to preserve such right, and may then be able to establish a method of complete and intelligent regulation and taxation and

to secure honest administration of it; or, on the other hand, whether the city may not more advantageously undertake to supply itself and its inhabitants with gas as it now does with water, and, as it has done by discarding the contract system in street cleaning, have done at one stroke, with bribery, corruption and strikers, and in this case with unsolved problems of supervision and taxation. Here lies the issue. Is private ownership a preferable method as it now exists? Is it preferable even if ideally reformed? And, if so, is such ideal reformation possible under New York conditions? Can New York escape the tyranny of Albany?

GAS LIGHTING IS A MUNICIPAL ENTERPRISE.

While, as we have premised, the cost of gas is with most people the controlling argument in favor of municipal ownership, there are other considerations which are entitled to great weight, either as leading to the conclusion of municipal ownership, or as indicating ineradicable objections to any system of private ownership, whether of the kind that prevails in New York or that which prevails in Paris. If any enterprise be deemed to be of a public nature and therefore properly to be operated by the public authorities, such as the post office, the improvement of rivers and harbors, the maintenance of lighthouses and the life saving service, the state canals, the highways and streets, or the municipal sewers, markets, ferries, bridges, docks and water supply, it will be found that such enterprise possesses one or both of two essential features. These are:

It supplies a want universal among the citizens, or so nearly so as to be of a general and public character;

It requires the employment of extraordinary powers and privileges, beyond those pertaining to the individual or the private corporations, and which the government, state, or municipality must either exercise itself or delegate to a private corporation; such as the power of eminent domain, the use of public streets and highways, or some direct precedence for those engaged in the service over private persons, such as the right-of-way of the mail-carrier or of the street car.

Judged by this analysis, gas lighting is essentially, naturally and necessarily a public municipal enterprise. Lighted streets at night are a necessity and no one objects that the city main-

tains lights in the streets at the public expense. A street lamp is worth as much in the preservation of law and order as a policeman. Indeed, one might easily trace the progress of municipal civilization, peace and safety, from the conditions attending the crude aggregations of population in the London and Paris of five hundred years ago to those of the modern metropolis, by comparing the former darkness of the streets at night with the number and brilliancy of the street lights of to-day. And this necessity of the city is in this latitude equally a necessity of every inhabitant of the city. We all must have artificial light in our homes. Most of us use gas for that purpose; some use it also for heat. More would use it, and much more of it, for both purposes, were it cheap enough. Gas is clearly, then, a practically universal necessity for the city of New York and for its inhabitants. The want of it is a public want; supplying it is a public enterprise. Nor can it be supplied except by the use of the public streets. The people must either use their own highways themselves to supply this public and general need, or must turn them over for that purpose to a private corporation. To be consistent, then, the city should either sell its docks and bridges, its markets and its water system, to private corporations; or else it should re-take into its own hands the supply of its artificial light. The reason for one is the reason for the other. The need of one is the need of the other. The advantage and profit of municipal ownership of docks, bridges, markets and water supply, indicate unerringly the advantage and profit of municipal ownership of gas lighting.

GAS LIGHTING IS A NATURAL MONOPOLY.

An unavoidable attendant upon private ownership of the gas supply is the destruction or absence of competition and the creation or existence of a natural monopoly. Recognition of this is involved in the legislation which fixes gas rates, for a statutory limit to price is never needed when competition exists. Two years ago there were seven gas companies in Brooklyn, some of which had obtained their grants upon the express plea, the direct promise that they would compete with those earlier in the field. For brief and infrequent intervals they voluntarily indulged in "gas wars"; not the healthful and stimulating competition which exists between merchants or manufacturers, but destructive contests, "wars" in very truth, intended to coerce or to ruin

rivals, and ending always in putting up rates again to the utmost limit of the law. Such is always the object of this pretended competition. Finally the seven combined into one company, an open and professed monopoly, held by the attorney-general of the state to be lawful, nevertheless. Such is always the end of this economically false competition. Boston, Chicago, Baltimore, present a similar history and the like is impending on Manhattan Island.

Two conclusions are sure. If only one gas company or trust, with one set of mains, works and officers be needed, then capital was wasted, when temporary and false, or forced and unnatural, competition led to the organization of a number of companies; and the wasted capital, and perpetual dividends upon it, will, if possible, be recouped from the public. The loss becomes finally a loss to the public. Yet the public did not create such rate "wars"; it only ignorantly permitted them. And if monopoly is thus the natural condition of street lighting, then it must be regulated and restrained by law. Competition is the natural regulator both of prices and of quality. If competition do not exist, then the law must intervene or the public must submit to whatever exactions may be put upon it. No school of political economy will maintain that monopoly should not be regulated and restrained, and legislation here and elsewhere has long, though imperfectly, recognized the monopolistic character of street lighting, and has made at least a pretense of regulation by law. We are justified in assuming, then, that such regulation is a necessary concomitant of private ownership.

IT IS NOT SOCIALISTIC FOR A COMMUNITY TO OPERATE A MONOPOLISTIC PUBLIC ENTERPRISE.

The argument for municipal ownership of gas is, therefore, that the public should absolutely, and not partially, control an essentially public and monopolistic enterprise. Absolute control is an attribute of ownership and of direct management, and of nothing less than these. It is not pertinent for one to hastily dismiss this argument by crying "socialism," or by retorting "Why do you not also propose that the city make and sell shoes, or run the great department stores?" The need for shoes is undoubtedly universal, but it requires no franchise in the public streets to supply that need, and there is still competition in the trade. The

socialist wishes to destroy all individual competition, the advocate of municipal ownership wishes to restore a public enterprise to the public, and to destroy a monopoly, individual competition being either already destroyed, or fast and necessarily disappearing. It is from the people that the rights and franchises of the corporations proceeded; it is to the people that they should be restored, now that it is found that monopoly has been created. We have passed the days of private roads and of toll-gates.

Governor Tilden signed the act which made the Brooklyn bridge and its railroad a city property, and the courts held it to be constitutional (76 N. Y., 476). Governor Hill signed the act which authorized the city of Dunkirk to supply electric lights for its inhabitants, and the courts sustained that law (49 Hun, 550). Governor Flower signed a law which authorized all villages of this state which had village water works to construct electric lighting plants, and the validity of that law has never been questioned in the courts. He afterwards signed the New York city rapid transit tunnel law which has been upheld (8 App. Div., 230, 152 N. Y., 257). In each case the courts of this state, following a long list of decisions elsewhere, held such enterprises to be city purposes.

Manchester has operated its gas works since 1824, Philadelphia since 1841, Richmond since 1852, Alexandria since 1853, Wheeling since 1870, some of the British cities for over twenty years; and the courts of Pennsylvania, Ohio, Virginia, West Virginia and Indiana have upheld the legality of gas lighting as a city enterprise. Perhaps these facts may serve as a short answer to any claim that municipal ownership is socialistic, for no one can reasonably consider that a socialistic project has had such support, and for so long a time, in statute law, in the decisions of the courts, and in actual practice. Indeed, if municipal ownership be socialistic, still its opponents have gained nothing except a word, and we do not argue nor dispute with nor upon words alone, but upon essential facts, reasons and consequences. The time has passed when the word "socialism" can scare away this municipal enterprise. It must first succeed in stopping the wheels of a score of others, all equally reprehensible, if this be.

If municipal ownership be socialistic, as to which, while not conceding the charge, we may well care nothing, providing it be also desirable and profitable, then New York is already commit-

ted to socialism, for the new charter declares that the city's rights in and to its waterfront, ferries, wharf property, land under water, public landings, wharves, docks, streets, avenues, parks, and all other public places, are inalienable; that hereafter no franchise or right to use the streets, avenues, waterways or highways of the city shall be granted for a longer period than twenty-five years, with power to provide for optional renewals not to exceed in the aggregate twenty-five additional years; that, upon the termination of any such grant, the plant and property in the streets shall either become the property of the city without compensation, or be taken at a valuation; and that, if such property becomes the city's without money payment, the city may either take and operate the said property on its own account, or make a renewal for not more than twenty years, or a new lease for not more than twenty-five years; *but that if under the terms of the original grant the plant and property in the streets become the city's upon payment* (*in which payment nothing is to be allowed for franchise*) *the city shall operate the plant and property on its own account for at least five years*, after which it may determine either to continue such operation on its own account or to lease the plant and property for the limited periods in the same manner as it now leases its ferries and docks.

This means municipal ownership as to future street grants, not only as to gas lighting, but as to electric wires in all uses, and as to street railroads, tunnel, surface or elevated. There thus remains only the question of how to deal in the present with the street grants which have been made in the past; whether to apply the remedy of to-morrow or that of yesterday; to re-acquire and then to operate directly; or to regulate and to supervise; a method which, by the very framework of our new city charter, is antiquated and hereafter to be discarded; and to regulate and to supervise in the present manner, or to hope and strive for the ideal and perhaps the unattainable in such regulation and supervision.

DR. SHAW'S FIGURES ON GAS LIGHTING IN PARIS AS A COMPARISON.

Unquestionably the present system has evils, other than the the evil of Albany rule, and those evils, we now make bold to say, are ineradicable unless the remedy of municipal ownership be

applied. A concrete standard of municipal regulation will here be useful for intelligent comparison. Let us visit Paris, lighted by a private company, and said by Dr. Shaw to be "the most beautifully illumined of all large cities." There is there but one gas company, because it has been recognized in Paris that "a consolidated gas supply can be more economically produced and sold." The company is a private corporation and its capitalization is fixed at 84,000,000 francs (less than $17,000,000). Quality of gas is fixed, a method of testing is prescribed; pipes must be laid and re-laid as the municipality directs. Prices are fixed by the city and gas for public lighting, one-fifth of the total supply, is furnished at cost. Capital stock cannot be "watered," dividends are fixed, and profits above the maximum are divided between the stockholders and the municipal treasury. At the expiration of the charter in 1910 the franchise and the plant revert to the city; meanwhile the annual public revenue from gas lighting approximates 20,000,000 francs, or $4,000,000.*

Now Paris contains about as many inhabitants as New York (unconsolidated) and Brooklyn, and has about half their acreage,—yet the capital stock of New York and Brooklyn gas companies exceeds $65,000,000, besides $30,000,000 of bonds, a total capitalization of over $95,000,000, or nearly six times that of the Parisian company. We may stop right here. For the purpose of considering what is intelligent and fair regulation, and whether or not it be possible, it makes little difference that this clearly excessive capitalization in New York and Brooklyn may be representative of dead and consumed capital, of antiquated and cast aside appliances; or may be all water or all capitalization of franchises (either of which should be deemed a financial crime); or in part one and in part the other. It consists of bonds and stock which we may well assume, since it would be vociferously claimed when the attack were made, are in the hands of innocent holders, the familiar "widows and orphans," upon whom such securities are always foisted, either because of the credulity of such people as investors, or because of the convenience which the original wrongdoer finds that such relations may be to him in a time of investigation. At any rate the securities are marketable and ne-

* These facts concerning Paris are from Dr. Shaw's "Municipal Government in Continental Europe," published by the Century Company, 1895.

gotiable, and have been marketed and negotiated, and the holders of them must be protected. The bondholders must have interest, the stockholders dividends. But how, then, having determined all that you can as to cost of production of gas of standard quality, will you fix a fair price, fair to both consumer and producer, unless you also fix a fair income upon an honest capitalization of a plant now necessarily employed in producing and distributing gas? And how will the legislator, even if city born and bred, and as honest as him for whom the lanterned lover of wisdom searched in vain through the Athenian streets, how will he reach that figure which will represent fair income to the producer, when he must travel through these mazes of dead capital, watered stock and unjustly capitalized franchises, and reach the actual, honest and present investment which only is entitled to interest and dividends? The task is insuperable. Who will undertake it? Who can hope that it will be accomplished? Yet, until it be done, until dividends and interest can be reduced to the basis of an equitable return upon the present value of the plant now employed, which is the basis upon which all private competitive manufacturing and merchandising are compelled, by competition, to rest, New York can never have its gas from private corporations at what it should cost. It is a Gordian knot which others have cut by means of municipal ownership; by city purchase at an agreed price, as in England, or by condemnation proceedings, as Brooklyn has just done with the Long Island water supply company, and as the recent decision of the United States supreme court in the case of that company will permit New York to do with its gas companies.

FRANCHISE VALUES.

One has but to mention this enormous capitalization of metropolitan gas companies to find his attention directed to another matter—the enormous value of the privilege of supplying gas in the great city, a privilege which has grown to its present value from a comparatively small beginning, and which is daily increasing. The hard lesson to impress upon the public mind is that franchise values, however small or great now, are always increasing with the growth of the city. Whatever the gas franchise is now worth is little beside what it will be as New York grows from three millions to four, to five, to six. And whatever it is now

worth, whatever it will become if allowed to retain its present perpetual character, have been given away by the people, freely and without price or return. Paris gets four millions of dollars a year from the gas franchise. Should not New York have at least half as much, beyond taxes on visible property? Yet it gets nothing. An annual income of $2,000,000 represents a capital of $40,000,000. Is it too much to say that the gas franchise of New York, given away, daily growing more valuable, is to-day worth $40,000,000?

There are other ways to test this franchise value. Paris allows its company 13½% profit upon its 84,000,000 francs, which amounts to $2,240,000 a year. Let us concede to the New York and Brooklyn companies twice this, or $4,480,000. Surely, this will be more than liberal. But they actually pay, in dividends and interest, about $6,300,000. The excess of about $1,800,000 represents a capital of $36,000,000, which, again, may serve as an indication of the value of the privilege which our gas companies enjoy.

On again: Let us assume—and it is no violent assumption, it will be found to be well within the limits of the facts, if one will examine the balance sheets of any gas, electric light, railroad, telegraph or telephone company, that is, of any company having a public franchise—let us assume that the bonds and the par value of the stock of the gas companies represent all cash contributions and the value of all tangible and visible properties. The market premium will represent, then, the investor's idea of the earning power of the stock, the goodwill of the business; in short, the franchise. Reckoned thus, the companies on Manhattan Island show over $30,000,000 of franchise value, and the Brooklyn company, whose entire $15,000,000 of stock is water, sustained in market value only by the value of the franchise, and worth more than par on the market, will bring the total to upwards of $45,000,000.*

* The excess of market values of New York and Brooklyn gas stocks over par values, computed in December last, is as follows:

Central	$500,000
Mutual	5,025,000
Consolidated	21,358,000
Equitable	4,200,000
Standard	400,000
Brooklyn	13,800,000
	$45,183,000

The changes in the market, since the adjournment of the legislature and the moderately successful campaign of the gas companies before that body, materially increase these figures.

Compute the value of this gas franchise as you will or as you can, and you will and can in no manner reckon it to be worth less than thirty-five to forty-five millions. That is what the bare, naked privilege of supplying gas is worth, and it represents a clear annual income of two millions or more a year. If this were all, some disciple of the impossible, some doctrinaire, or some advocate of private gain at public cost, might still inspire or deceive us to hope that this princely gift of the people's over-generous representatives of the past might be reached by some yet undiscovered method of taxation; for hope is always permitted to fallen and unhappy mankind. But when the score of years have passed, which, at the least, will be necessary to attain this unattainable result, when Jacob shall have served the promised time in toil and sweat for his Rachel, lo, another period, much like the first, will have opened before us, as the like did to Jacob, for at the end of another ten or of another twenty years, this gas franchise will have grown to double its present value. This problem cannot be solved by any law except one which will permit the community to retake these franchise values into its own hands, now and here; it can be solved by no feasible and enforceable system of taxation or regulation, by nothing less than municipal ownership. That is the only way to overtake this constantly progressive unearned increment of unbought franchise values.

PRIVATE OWNERSHIP OF PUBLIC FRANCHISES MEANS OFFICIAL CORRUPTION.

But if all this were wrong, if some system of regulation and taxation were at our hands which could deal effectively with franchise value and its constant increase, with capitalization, dividends, quality, illuminating power and prices, with every detail with which the law must deal with private ownership in order to create a reasonably fair condition, to what would it all lead except to an unbearable aggravation of what is now the most burdensome of all the attributes of private ownership of the gas supply in New York, to an increase in official and legislative corruption and bribery, to a deeper immersion of the gas company in politics, as, in self-defense of its selfish interests, more intimately then concerned in politics, it becomes more largely a con-

tributor to the funds of campaign committees, of party and legislative managers, and of lobbyists. Now it seeks only franchises, public contracts and the retention of rates. Add to these a state or municipal commission, to be resisted, foiled or bribed, aided by a swarm of inspectors, to be deceived or bought outright, and all empowered to regulate and to supervise everything from A to Z in the gas company's existence. Can you succeed in meeting that condition without reforming and remodelling every phase of New York politics? "Lead us not into temptation" may reverently be said to be more than a prayer for the devout. It should have a place in the science of government.

The history of these and of like corporations having public franchises and requiring public regulation is the history of legislative and aldermanic bribery and corruption; of the undue and improper influencing of public officials; of the waste of public property by aldermen and other officials giving it away for less than it is worth and for less than can be obtained for it; of the daily robbery of the people, and of the many poor more than of the few who are rich, by maintaining an unjust and extortionate legal rate. One month's gas bill does not rob one man much, if it is charged at $1.25, instead of 75 cents or 60 cents per thousand. It is a little thing thus, but it makes an enormous aggregate for five years in a city of three million inhabitants. All this, year by year, for years past and to come, all the vast franchise values, now and as they are daily increasing, the sustenance of lobbyists and the petty bribes of officials ($200 apiece was openly charged to be the price for assemblymen who would vote to reconsider the vote in favor of the $1.00 gas bill last month!)—this is the price which the people pay for the continuation of this struggle between private and public interests. You have come to expect it, both of these companies, and of the railroads and others of the like. But you find nothing of the sort, nothing at all comparable with these evils, with the parks, the schools, the ferries, the docks, and the other enterprises in which the city engages directly. The private interests are removed in those. The steel finds no flint from which to strike a spark. And if a spark be struck, if there be some of the evils of human nature manifested in the administration of these other municipal affairs, it is all as nothing compared with the flame and glare of official scandal and

corruption arising from the strife between these private franchise corporations and the public interest.

Count over the last winter's experience. In Brooklyn an iniquitous five year gas contract, held up for months while the most financially responsible newspaper in the city charged that the difficulty was whether the bribe should be $50,000 or $75,000, and executed finally in defiance of public opinion. In New York a gas franchise given away for practically nothing, and such a storm of public condemnation aroused that both givers and receivers were glad to abandon the plunder if nothing more would be said. In Albany a bill to reduce the price from $1.25 to $1, the price paid in so many smaller cities, defeated either by the lobby or by the boss, or by both perhaps, passing the assembly one hour to be re-considered and destroyed the next on the motion for re-consideration of a member who might not, probably, on his occasional visits to the metropolis, be entirely safe from a coroner's jury in the morning if the hotel bell-boy should not instruct him in the difficult and hazardous art of extinguishing the gas at night. Did municipal water, or municipal ferries, or municipal bridges, or municipal docks, or the parks, or the schools, or the fire department, or even the much maligned metropolitan police (having no reference, of course, to police commissioners), did they altogether cause any such turmoil and trouble and scandal in the two cities last winter? Municipalize the gas, then, if you will end the gas scandals.

MUNICIPAL OWNERSHIP IN OTHER CITIES.

Gas plants are operated by 168 cities of England and Scotland, including almost every city of consequence, except London; by 338 cities of Germany, including 30 of the largest, such as Berlin, Hamburg and Dresden; by Brussels, by Amsterdam, by many cities in the British colonies, and by 12 American cities, including Wheeling, Louisville, Richmond and Philadelphia. Electric lighting plants are operated by over 200 American municipalities, including Dunkirk, in this state, and Jacksonville, Springfield, Little Rock, Topeka, Bay City, Detroit and Chicago; by many British cities; by some in the Australian colonies; and by 13 German cities, including Hamburg and Dresden. Street railroads are owned, or owned and operated, in 33 cities of England and Scotland, by some cities of Germany, Switzerland, Holland, and

of the Australian colonies, by Toronto, and in a measure, by New Orleans. To put the matter into condensed form, municipal ownership of one or more of these street franchises prevails in over 700 cities, and is authorized by the laws of a score of states and countries. Time was when private ownership of all street franchises was the rule. Now the chiefest cities of the world are forsaking it. Progress in the art of municipal affairs is all in the direction of municipal ownership.

Municipal ownership is, therefore, no new or over-radical thing. It is neither socialistic, communistic, nor populistic. It is feasible and practicable. It must be at least reasonably successful, and it cannot be attended with any greater political evils than the no more universal municipal ownership of docks, ferries, bridges, markets and the water supply. So much the experience of these other cities indicates to us.

While, however, the mere mention of this host of examples might be deemed sufficient in such an examination of the subject as that in which we are engaged, it would be unfair to the subject to leave this branch without some more careful noting of the results of municipal ownership of gas in these other cities, as compared with private ownership here. Birmingham in 1875, under the mayoralty of Joseph Chamberlain, bought out the private gas company at no very low price. It has reduced the price of gas from 3s. 1d. (say 76c.) to 2s. 2½d. (say 55c.), yet it has made in twenty-one years a surplus profit of £794,954, which amounts, at $5 to the £, to $3,974,770, *all of which is after all allowances for repairs, renewals, depreciation, interest, operating expenses, and the sinking fund to clear off the indebtedness, have been provided for, and a reserve fund of $500,000 accumulated.* Manchester, the pioneer city in municipal gas lighting, sells its gas for 2s. 3d. (say 56c.), and made last year a net profit of $210,000. Edinburgh in like manner made a net profit last year of $190,000, with the price at about the same as Birmingham and Manchester. A striking contrast is found in Liverpool, where, under private ownership, gas costs 3s. 4d. (say 79c.) per thousand. Thus, under these closely similar conditions, municipal ownership shows, in price to consumers, 55c. or 56c. compared with 79c., the result of private ownership in Liverpool. New York and Brooklyn would be overjoyed if they could rival even Liverpool's price, which is 40% less than we pay. The testimony is uncontradicted and beyond attempt at contradiction that mu-

nicipalization of gas franchises in English and Scottish cities has meant large reduction in prices, substantial profits and better management. *All items of expense, even to the providing of a sinking fund to repay the invested capital, are required, by the act of Parliament, to be met before profits are taken out (an unheard of thing with your private company, which regards stocks and bonds solely as "securities," but never as debts which will accrue and must some time be paid)*; yet the profits realized have materially reduced taxation in all of these British cities. London stands almost alone under the rule of the private monopolies, and municipal ownership is making headway there, for the Progressive or Liberal party is doing what we must do here—it is taking the question into municipal politics.

One other fact concerning British experience—municipal ownership has uniformly brought an improvement to employees in both hours of labor and rates of pay.

Even in Philadelphia, bad in so many respects as the management of its gas works has been, because of irremovable and irresponsible trustees, gas has almost without exception been 25 cents a thousand cheaper than in New York, as it is to-day, and that difference means an enormous saving to the people. In 1895 the net balance of receipts, $3,155,956.47, over disbursements, $2,985,513.85, plus improvements, $54,589.59, was $115,853.03, and the city used free $638,494 worth, making a total profit to the city of $754,347. Reckon Philadelphia gas at $1.25 a thousand, however, the price charged here, and you will find that the people saved $788,989 in their gas bills as compared with New Yorkers, while what the city's street lights would have cost at $1.25 a thousand would have been $798,117; and these two items, plus the $115,853, balance left in the city treasury, or a grand total of $1,702,100, represent the difference in cash saving for the year 1895 for Philadelphians by reason of the fact that their city supplied gas at $1, and that they did not have to pay the New York price of $1.25. *

* Deduct, now, from this $1,702,100, all the additional items which the most hostile critics of the Philadelphia works claim should be added to cost, which do not exceed $1,100,000, and we still have a difference of $600,000, which Philadelphia received in 1895, by way of reduced gas bills as income on the municipal ownership of the gas franchise. New York gets nothing in return for its franchise Thus, Philadelphia, in many respects the most unfavorable illustration of municipal ownership, shows, in the worst view, an annual return of $600,000, where we have had nothing.

In Wheeling, W. Va., the city took the gas works years ago, paying for them by the issue of bonds. The bonds have all been discharged out of the profit on gas, so that not one dollar of taxes has been levied upon the people, and the works are now owned free and clear, and are returning a substantial yearly profit with gas selling at seventy-five cents a thousand. No opponent of municipal ownership has yet ventured to base an attack upon Wheeling's experience. Compare it with the history of gas companies and with the present price of gas in New York and Brooklyn. The city of Richmond, Va., sells gas for one dollar per thousand and makes large profits. Why should not New York do as well? These few instances suffice to show what can be done, and what ought to be done under intelligent and honest government in New York.

One more illustration—the most notable of all—the city of Glasgow. In 1869 it took over the gas works, paying the private corporation which then owned them over two million six hundred thousand dollars. It has since spent over two million seven hundred thousand dollars in improving and increasing the plant. During twenty-five years it has not only paid off, out of its receipts from gas, more than one-half the debt thus incurred, but it has paid all charges and expenses, *has written off large sums each year for depreciation* (*which few, if any, gas or street railroad companies ever do*), *has accumulated a sinking fund toward the remaining indebtedness* (*which no gas or railroad company in this country ever does*), and it has reduced the price of gas from one dollar and fourteen cents per thousand to fifty-four cents, while increasing the use of the product three-fold; yet it made a profit last year of $150,000. The record of Glasgow puts this American city to shame.

The situations of these cities are too diverse, the savings to the public are too great, to enable us to explain away these results by any differences in the prices of labor or coal. The results are due chiefly to the fact that cities can borrow money about three per cent. cheaper than private corporations, and to the additional fact that cities do not attempt to water the capital employed, nor to pay dividends upon fictitious capital, or capital which has been used up and consumed a generation ago, and which ought to have been long ago charged off to depreciation.

WILL NEW YORK FOLLOW IN THE LINES OF PROGRESS?

But we are told that municipal ownership will build up dreadful political machines. The answer is found in the civil service provisions of the constitution. Yet, if any one nevertheless believes that municipal ownership of street franchises will create a new opportunity for corruption and will strengthen political rings, let us ask him why he should not fear a like condition from city schools, police, fire department, the street cleaning, the parks? The reason is that there are no evils there with which the people have not been always able to deal. And so the people can and will deal with any evils which may be attempted under municipal ownership of lighting; secure, too, in the conviction that by no possibility can gas lighting ever get more completely into politics, or more directly corrupt public employees, than it now does under private ownership.

There is, then, but one thing for us to consider at present, and that is the practical side of the proposition, in view of existing private ownership and the existing indebtedness of New York. Of course, existing property rights must be respected and cannot be confiscated. They can be terminated, as they were in England, by purchase, or else as our laws will permit, by condemnation. But we need not, even if the debt limit would permit, attempt any wholesale and sudden acquisition of all existing franchises for lighting, or of any wholesale construction of new plants. There are other and pressing city purposes to be provided for, schools, parks, docks, street paving, bridges; and what is done must be done with fair consideration of these needs, especially the need for more schools and bridges. New York should first try its hand and see how it can make municipal ownership work. Let it follow Detroit's example and construct a small lighting plant, and light only its own streets, or, perhaps, only a section of them. This would not require the purchase or condemnation of any franchise, nor any expenditure for which it could not easily provide, while meeting all its other requirements. But the city owes it to the cause of progress and of good municipal government, owes it to her citizens and to herself, to make directly an experiment, on however limited a scale, of municipal ownership and management of street franchises. The thing itself is no longer experimental, in the light of the experience of Glasgow. Edin

burgh, Manchester, Birmingham, Wheeling, Richmond, of all the chief cities of Germany. The trial will not be of municipal ownership, but of New York, of New York conditions, politics and citizenship. If success follow, and shame to us if we cannot succeed where none have yet failed, then by degrees, a part in one year, a part in another, New York can take over existing franchises by purchase or by condemnation, doing only what her resources will permit. But ultimately and surely, just as consolidation was inevitable, the people of this metropolis will some day relieve themselves of these street monopolies, will stop this corrupting of politics, and of public officials, will end this waste of public resources and this daily robbery of the people, which private ownership of street franchises means.

The question is not one for property owners and taxpayers alone. It touches the pocket of every gas user to the extent of from twenty to forty per cent. of his gas bill. It reaches every inhabitant of the city who is now, for economy's sake, compelled to use oil lamps, and who would be more comfortable, happier and healthier if gas were cheap enough for him to use. And cheaper gas could be used for fuel, to the saving and to the untold comfort of the dwellers in New York's crowded apartments and tenements, for it has been the experience of Glasgow that in this direction its municipal management was able to cause a doubling of the consumption of gas. It is a question which concerns every taxpayer, every voter and every inhabitant of the city.

NO GOVERNMENT SHOULD OPERATE AN INDUSTRY.*

By Allen Ripley Foote.

It is the part of wisdom to require those who advocate a change in public policy to show wherein the change proposed will benefit public or individual welfare; also that the suggested method for remedying the evils complained of, or for securing the benefits promised are the best that can be devised. The work undertaken by the Reform Club is to induce a careful and thorough study of the problems of Municipal Administration on the part of the people as a prerequisite to their correct solution. Problems are solved by the application of correct principles. Principles are evolved by observations of science, or teachings of experience. They may be discovered. They cannot be invented. If correct deductions are not made from the observations of science or teachings of experience, or, if the deductions made, in themselves correct, are based upon incorrect observations or data, the conclusions reached will be erroneous and the people will be misled by false, although honest-minded, teachers. Teachers of economic fallacies, by delusion or corruption, are the assassins of public welfare and individual prosperity. The time has come when people must learn that public policy, guided by incorrect economic principles, is more potent to destroy, than their industry or self-denial is to up-build prosperity. They must know that the disseminator of unsound economic doctrines—the more

* Note.—This paper was written at the request of the Committee on Municipal Administration of the Reform Club of New York, in reply to a paper under the title of "New York City Should Own the Gas Supply," written on a similar request from the Club by Mr. Grout. In submitting his paper, Mr. Grout "reserved full right to revise it as may seem fit, either by addition or otherwise." This reply was written to Mr. Grout's paper as first presented. If, in comparing the two papers as printed, points are found in his paper not noticed in the reply, or if there are points in the reply not germane to his paper, the reader will understand that the discrepancy is due to the exercise of the reserved right of revision.

honest he is, the more dangerous—does in the economic world as great an injury, as the disseminator of contagious disease germs causes to physical health. The prosperity of an individual is as dependent upon the economic policies fixed by the votes of his fellow citizens, as his health is dependent upon their maintenance of wholesome sanitary conditions. Upon correct economic education the prosperity and the life of communities and of the Republic depends.

FUNCTIONS VS. INDUSTRIES.

This subject cannot be properly discussed without clearly indicating an easily distinguished line of demarkation between governmental functions and private industries.

In none of its relations to the people does a government differ in any respect from the relations of man to man.

When a person performs a service or does a duty to which no direct money or other valuable consideration is attached, such service is a social function. When he performs a service for a valuable consideration, such service is for him an industry. The acquisitions of life are twofold, those that make for character, and those that make for property. All individual services designed to create and maintain conditions conducive to good character and good health, for themselves and their associates, are functions. All individual services are rendered for economic considerations, for pay, are industries. In a case of sickness or accident a person may attend another moved thereto by motives of kindness. That act is a function. A physician, no less kindly, may attend the same person professionally moved thereto by motives of gain. That act is an industrial service.

A public function is a service performed without compensation solely for the good of the general welfare.

An industry is an undertaking, business or vocation carried on or followed as a means of making a commercial profit or a living.

In political organization, government occupies the domain of the functions, individuals occupy the domain of industry. Governments are supported by taxation; individuals by industrial incomes or earnings. Services rendered by the government are paid for by taxation. Services rendered by individuals are paid for by those to whom the service is rendered. Those who observe the laws are taxed for the support of a government to educate the families and protect the property of the law abiding and to restrain

and punish law breakers. The best government is one that most thoroughly governs those requiring the restraints and punishments of law. The defence of individual life, rights and property depends upon the efficiency with which laws are enforced. To pay for the administration of law is one thing, to pay for gas burned by others is a very different thing. This difference illustrates the difference between a governmental function and an industrial service.

POLITICAL VS. PUBLIC SERVICE CORPORATIONS.

A government is a political corporation. The Constitution or Charter under which it operates, defines and limits its powers and provides for the regulation and supervision of its acts. Within the limits of its charter it exercises control over the subjects delegated to it, subject to revision by the higher authority that created it. The acts of a municipality are subject to inspection and review by the legislature and courts of the state, and above these by the sovereign people.

A political corporation has no industrial capital. Its treasury is supplied, not by payments for services rendered in the industrial sense, but by involuntary contributions collected as taxes assessed under authority of law. Persons paying taxes receive no negotiable stock certificates showing the share they have contributed to a capitalized fund. They are not at liberty to pay a certain sum and then to decline to make further investments, or to relieve themselves from an investment by selling out at pleasure, at its market value.

Payments received into the treasury of a political corporation are not intended to be capitalized and kept unimpaired by earnings from services rendered. They are intended to be dissipated by paying for non-industrial services, such as the teaching of public schools, and the protection of life and property by the police and fire departments. Its services are not designed to return cash dividends to taxpayers. They make compensation by promoting the general welfare, protecting life, health and property, disseminating education, regulating the operations of industry and trade, and administering justice.

Individual membership in a political corporation is involuntary. It is decided by location of residence and property. It can only be severed by removing both beyond the jurisdiction of

political government. The face of the earth is covered with political corporations. No person can escape from them. Freedom to move from one to another he may have. Escape from them is absolutely impossible.

A public service corporation is an industrial organization chartered by a state or by the United States. It exercises its powers subject to inspection and review by the legislature and courts of the state or of the Nation. Its capital is raised by voluntary contributions for the amount of which negotiable certificates of stock are given to contributors. A contributor can decline to make further contributions, after fully paying for the shares for which he has subscribed, and he may sever his membership in the corporation, at any time, by selling his stock certificates, and thus recover a part, the whole or more than the whole of his original contribution, accordingly as the market value of his shares is less, or more, than they cost him.

The capital of a public service corporation is designed to be maintained unimpaired, to be augmented, and to earn dividends by supplying industrial services as commercial commodities, to be paid for by users, such as a supply of gas or electricity for light, heat and power; and the transportation of persons and property.

The employees of a political corporation are appointed on the requests of politicians, to reward work done for the party, or by preferment under civil service examinations and rules, for proficiency in rendering non-industrial services. They have no industrial interest at stake in the general success of the administration, beyond doing what they can to keep the party they affiliate with in power, and to secure their own advancement which not infrequently depends more upon effective party work than efficiency in the work they are paid out of the public treasury for doing. These conditions do not permit of the free exercise of the highest order of ability in direction and administration on the part of the executive or any of his subordinates, nor provide just compensation for the honest and intelligent discharge of duties by employees as a whole.

The employees of a public service corporation are appointed on the recommendations of persons directly interested in the commercial success of the undertaking. Their compensation is regulated by the commercial value of the service they render,

which has an industrial purpose. They are directly interested in the commercial success of the enterprise. Its success means continuous employment and a chance for better pay. Its failure means loss of employment or slow starvation for both capital and labor. They may obtain a capitalized interest in the corporation by investing in its shares, and advance themselves in its management by attention to its interests, showing ability or special genius in handling the work entrusted to them. These conditions permit, stimulate and require the free exercise of the highest order of ability in direction and administration, on the part of the executive and all his subordinates, and provide just compensation for the honest and intelligent discharge of his duties by every employee. The occupation being productive, its compensation can fluctuate in relation to its net earnings. By this means honest, intelligent effort in labor, conscientious care in preserving equipment used and in saving materials consumed, can be rewarded, complying with the fundamental law of labor and property:—Each shall have according to his production *and saving.*

It is essential to keep these distinctions between political and public service corporations well in mind, because choice must be made, for the services under consideration, between a political and an industrial monopoly. The character of each and the inducements that may be given by each to users of the services, must be carefully studied and rightly valued.

It is claimed that "A municipality is a moneyed business corporation in which every resident is a shareholder." This is denied for the reasons given above and the following reasons:

Members of a political corporation are *citizens, not "shareholders."* The voting power is based on *manhood, not money.* Members of a business corporation are "*shareholders,*" *not citizens.* The voting power is based on *money, not manhood.* When the day comes in which membership in political corporations carries with it the power of a "shareholder," and the vote is based on the number of dollars contributed by each to the public treasury, the end of the Republic will come, a monarchy of money will take its place. This is the logic of the suggestion made by those who pose as champions of the rights of the people; calling citizens shareholders.

POLITICAL VS. PUBLIC SERVICE MONOPOLIES.

Any service is "public" when it supplies a want common to all citizens, which cannot be supplied with equal advantage by voluntary or individual action, or without the employment of extraordinary powers and privileges which must be exercised by the government or delegated by it to a public service corporation.

Whether or not a particular service shall be rendered as a government function, and supported by taxation without direct charges to individual users; or, as a public service industry, supported by private capital and direct charges to individual users, must be determined solely by the character of the service, and the inherent efficiency of political or industrial corporations, fitting them to perform the service to the best advantage for its users.

When a function requires for its proper performance a service identical with a common want of all citizens, or the reverse, the larger interest should control the lesser interest, and the service should be rendered as a function, or as an industry, as the case may be. The function of policing the streets with light is a lesser interest than the service of supplying light for business places and residences, about one-fifth. The educational function of the mail service is a greater interest than the commercial value of transporting the mails. Tested by the standards given, supplying gas or electricity for light, heat and power is naturally and necessarily a public service industry. The mail service is a government function.

In their sphere of action public service corporations are the counterpart of political corporations. The one renders industrial, the other functional services which supply wants common to all citizens that cannot be as well supplied by individual action, and which cannot be effectively supplied without the exercise of special powers and privileges, and protection from interference or competition. To reach the highest degree of perfection or efficiency in supplying the service, the corporation undertaking it must have absolute control of the whole of it. Such corporations are natural monopolies. The failure to recognize and to be governed by this fact has caused nearly the entire brood of evils complained of by those who seek to enslave industries by transforming them into functions. Failure correctly to understand an economic fact, that a public service must monopolize

the whole of the service it renders, caused the first mistake. False economic education advocating municipal ownership, is the cause of the second mistake, accomplished or proposed. To unwise legislation and court decisions, permitting or requiring competition where competition is an economic crime, is due much of the failure to secure public industrial services on best commercial terms for users, and much of the competition entailed on such enterprises. To unwise legislation, which failed properly to protect and serve the general welfare and the best interests of the users of these services, is due the duplication of plants "where but one is needed," and franchise wars, the cost of which,—"dead capital,"—is paid out of income from charges for the service.

It is fine to declare "the people of this Metropolis will some day relieve themselves of these street Monopolies," but it would be better for the people to teach them that all the evils from which they suffer are the direct result of "temporary and false, or forced and unnatural competition," instigated and permitted by those who declare there shall be no monopoly, in a sphere where natural economic law ordains a monopoly must exist. This natural condition is "an unavoidable attendant upon private ownership of the gas supply." It has unquestioned existence wherever municipal ownership has been established. The choice is not between a monopoly and no monopoly, but between a political and an industrial monopoly.

ECONOMIC ADVANTAGE THE CONTROLLING FACTOR.

The economic right of a government to do for its own account any industrial service which it can cause to be done at less cost to taxpayers, or to the users of the service, by contracting with individuals or corporations, is denied. The obligation of a government to control all its industrial transactions by considerations of economic advantage only, is fundamental. It is the duty of a government to minimize the amount collected by taxation, and to maximize the benefits it confers. Its primary purpose is to protect, benefit and stimulate the industries of the people; not to make a profit out of selling privileges or services, nor to encroach upon the domain of industry by monopolizing its enterprises. Governments have no reasons for existence as industrial organizations. This fact is recognized when municipalities contract for the construction of schoolhouses, bridges, city halls, water works,

sewers, etc., instead of buying material and employing labor to make the construction under the supervision of their own departments. It is recognized when the United States government contracts with private companies to carry its mails between its post offices and the depots and steamers in large cities, instead of buying wagons, horses, etc., and having the work done by its own employees.

To determine whether the economic advantage is in favor of a political or an industrial corporation, all privileges enjoyed by the government in doing the same work, by right of its monopolistic control of conditions, must be delegated to the public service corporation without charge, in order to make an equitable comparison.

To illustrate: Suppose the United States government finds the cost of carrying its mails through the streets of New York for one year, when owning the wagons, horses, etc., and employing men direct, is $75,000. The next year it undertakes to get the work done by contract. That it may be done, it delegates to the contractor "direct precedence over private persons giving the right of way of the mail carrier," the same power or monopolistic privilege it had exercised in its own behalf; but it charges the contractor $10,000 for the privilege, and his bid is $80,000. The real bid is $80,000, less $10,000, or $5,000 less than the cost to the government of the same work done on its own account.

To the failure properly to consider and account for the influence of such factors, the inception, growth and present agitation of the question of government ownership of industries is wholly due.

THE RIGHT AND DUTY OF REGULATION AND SUPERVISION.

A State has no moral right to delegate its powers, especially the power of taxation, to any political sub-division without providing for an accurate account of the use made of it. It has no moral right to charter public service corporations, and delegate to them the right to exercise special powers, without fully and intelligently safeguarding the interests of the people. "No school of political economy will maintain that monopoly should not be regulated and restrained." But advocates of the municipalization of industries desire to limit the scope of State regulation to industrial monopolies and permit political monopolies to

go free. They express the "hope that some day the city may attain the power to rule itself." There are others who hope the time may come when the accounts of every political subdivision of the State will be kept in form prescribed by a Board of State Auditors, and will be examined by such a board as carefully as the accounts of national banks are scrutinized by National Bank Examiners. Also, when the annual reports of political monopolies will furnish a reliable basis for statistical comparisons that will clearly show the uses made of the power of taxation and the benefits returned to the people in consideration therefor. There is no question but that such regulations and supervision will be effective, and "obviously far different from what they have been in the past" and that such success will remodel "every phase of New York politics."

Public service corporations do not ooject to a scientific regulation and supervision designed solely to safeguard the interests of the people, and to satisfy the State that the powers delegated to them are properly administered. They do object to investigations ordered solely for the purpose of manufacturing political capital, and to enable some vainglorious demagogue to pose as a defender of the people against "monopolies."

The requirements of scientific regulation and supervision for political and for public service corporations are identical. No requirement is necessary from the one that is not necessary from the other, to properly safeguard the general welfare and promote the prosperity of the people. Supervision by the State is fundamental. It must be made the basis of any true educational work in municipal affairs, designed solely to aid in the creation and organization of public sentiment in favor of an efficient and beneficent administration. Investors in the stocks and bonds of public service corporations, and in municipal bonds, will gladly keep even pace with politicians when they move for progress in this direction. To the lack of proper State regulation and supervision, a large share of the maladministration of cities, the corruption of legislators and officials, and the existence of speculators in politics is due.

One point is generally overlooked by municipal ownership advocates when discussing this subject. The power of regulation must be exercised by the power that grants the charters under which political and public service corporations acquire the right

to exist. A plea for "home rule" without state regulation is the plea of a culprit. It is a plea made for a municipality that more than all others has required such regulation to protect its citizens from being plundered by maladministration. When paragraphs pertaining to the government of cities were being debated in the last Constitutional Convention of the State of New York, this plea for home rule, for freedom from State regulations, was put forward by delegates from New York or Brooklyn. They were plainly told of the times when it had been necessary for the honest law-abiding citizens of those cities to come to Albany and ask legislators from country districts to save them from the tyranny and exactions of corrupt organizations that had seized upon the machinery of party government and ruled the cities for an unholy profit. They were told that such occasions might again arise, and when they came, the State should not be found shorn of its power. The gratuitous slurs thrown at country legislators; the contemptuous references to "regulation from Albany"; the tendency to decry all regulations and supervision of the doings of politicians, not conducted by themselves, which run all through this brief asking for municipal ownership of enormous interest, the doubling of political patronage, and of the total amount of money they can collect and disburse for public account, should be sufficient in itself to rouse every thoughtful citizen to herculean efforts to defeat the proposal. Politicians should be required to administer the affairs now committed to their care, efficiently and beneficently, before reaching out for the control of other interests. They should prove themselves faithful in ruling over a few things, before asking to be made ruler over many things.

MUNICIPAL FRANCHISES.

In nothing is there greater misconception shown regarding the correct economic principles involved in public service problems than in the claims made by advocates of municipal ownership, regarding the value of municipal franchises.

Stated briefly, a franchise is a legislative right granted to an individual, firm or corporation, to perform a specified public service, and authorizing the exercise of special powers and privileges necessary to the efficient and economic rendering of the service.

A municipality in granting a franchise is under moral obligations to align all of its provisions with the strict requirements of economic considerations, that it may obtain the best service at the lowest profitable price to users.

There are three parties in interest: the users who pay all charges for the service; property owners who pay all taxes and secure the benefit of all unearned increments; and investors who supply capital and management. Municipal authorities may be said to represent a fourth interest, the political corporation. But a political corporation has no interest differing in any way from that of the users of the service, or of the taxpayers. Considered briefly, these interests may be stated as follows:

(1.) Users of Services:—To secure the best service at lowest profitable price.

(2.) Property Owners:—To have the value of their property enhanced by being made accessible and supplied with all modern conveniences at low cost.

(3.) Investors:—To have every possible element of risk eliminated from their undertaking and a reasonable dividend made certain.

Regarded purely as a business transaction, it is evident that the best bargain can be made with capital by guaranteeing permanency of investment, by making the terms of the franchises co-extensive with the want to be supplied common to all citizens, that is, perpetual, all-inclusive and exclusive. The best bargain for users of the service can be made by stipulating that it shall always be rendered in the best manner known to the art, and at the lowest profitable price. The best bargain for property owners is made when its terms are best for users. The better the advantages are that a municipality can offer to citizens, in the form of public services, the more desirable the city becomes as a place of residence and business. The unearned increment from the possession of such advantages is vastly greater than any portion of tax payment that can be saved to a taxpayer by enhancing the cost or deteriorating the quality of the service to users; through taxing the property of public service corporations; demanding tribute from them in the form of a percentage of their receipts; or increasing unnecessarily the amount of capitalization by exacting payment for their franchises. To satisfy these con-

ditions, the franchise should not only be perpetual, all-inclusive and exclusive, it should be granted untaxed in any way and without charge of any kind, and the property of the corporation, necessarily used in rendering the service, should be untaxed, entered on the free list as in the public service, the same as school houses, city halls, etc.

This statement is so directly at variance with the teachings of able men and with the views advanced by my opponent that some hesitancy might be felt in making it, if it were not as certain as the rules of mathematics that every person whose intelligent judgment entitles his opinion to respect will say without hesitation, after carefully examining the proposition, that capital in unlimited abundance and management of unexcelled ability can be obtained for the asking on these terms. Tested by every essential economic requirement and financial consideration, the bargain indicated is sound in every part and detail. It is because franchises have been granted on terms that violate these conditions; because State constitutions, city charters, notably the charter of Greater New York, legislation and court decisions have required franchise conditions that are not based on sound economic conditions, that the people are deprived of their right to the enjoyment of the public services rendered in the best manner known to the art and at the lowest profitable price, while at the same time, public service corporations are decried by the multitude and by blind leaders of the blind as "robbers."

If the people are to secure greatest possible benefits from governmental functions and public industrial services, the exercise of the powers and privileges of government and the direction of public policy must be guided by correct principles, not expediency. Until this is done in every phase of governmental activity, national, state and municipal, conditions upon which a stable prosperity for the whole people can rest will not be established.

REASONS FOR ADVOCATING MUNICIPAL OWNERSHIP.

The reasons advanced for the proposed change in public policy will now be reviewed:

> "In its last analysis the proposition that the city of New York should own and operate the gas supply system for its streets and for its inhabitants is purely a business proposition."

To this statement I agree.

> "The power and right of the municipality to do these things have been questioned in few instances, and are here and now conceded or established."

The right of the municipality to do these things on the basis of a "pure business proposition" is here and now denied and disproven.

> "Expediency, that is, the question whether or not the city can do better for itself and for its inhabitants than can private enterprise, is, in truth, now the final inquiry, the controlling consideration."

This is not a question of expediency. It is a question of fact that must be solved by an appeal to correct economic principles and experience.

> "While, as we have premised, the cost of gas is with most people the controlling argument in favor of municipal ownership, there are other considerations which are entitled to great weight, either as leading to the conclusion of municipal ownership, or as indicating ineradicable objections to any system of private ownership, whether of the kind that prevails in New York or that which prevails in Paris."

Users of gas are the controlling majority of the people. When they find that city work, considered as a whole, is being done better and cheaper than the same class of work is being done by private enterprise, when the city can buy material, employ labor and build a school house better and cheaper than it can contract for its building, users of gas may be made to believe that the city can manufacture and deliver gas better and cheaper than a private corporation.

"There are other considerations entitled to great weight either as leading directly (*away from*) a conclusion favorable to municipal ownership, or as indicating ineradicable objections to it." They are written in the records of the criminal Courts giving the details of the trials and convictions of the representatives of municipal government that New York has sent to Sing Sing from the days of "Boss Tweed" to the present time. "The *steal* found a flint from which to strike a spark."

> "The advantage and profit of municipal ownership of docks, bridges, markets and water supply, indicate unerringly the advantage and profit of municipal ownership of gas lighting."

They do nothing of the kind. Docks are merely rented. The city has not been able to do this without scandal. Bridges are either free and supported by taxation, or a toll is collected on them, which is the simplest of transactions. Markets are rented. Water is not a manufactured article, and is the safest and simplest of all fluids to distribute through pipes. The ability to collect

rent for a dock, market stall, or toll on a bridge; to pump water and collect water rents, and do it well, is vastly different from the ability to buy material, manufacture and distribute gas, collect the bills for the service, and hold every detail of the service to the highest economic and scientific efficiency.

> "The argument for municipal ownership of gas is, therefore, that the public should absolutely, and not partially control an essentially public monopolistic enterprise."

The argument against municipal ownership is that it is the function of the government to control, not to own and operate. Control is lost when the controlling power owns and operates. The true condition is to recognize the service as a monopoly, deal with it as such, cease chasing the *ignis-fatuus* of competition when the law of competition cannot apply, and place the monopoly under proper regulation and supervision. If the government is not strong enough, nor wise enough to regulate and supervise the business of a monopoly properly, it is not strong nor wise enough to own and operate the business of a monopoly economically.

> "This problem cannot be solved by any law except one which will permit the community to retake these franchise values into its own hands, now and here; it can be solved by no feasible and enforceable system of taxation or regulation, by nothing less than municipal ownership."

A law relieving public service corporations from all compensations or taxation on account of their franchises in consideration of their faithful compliance with proper regulations will settle the whole problem "now and here," and will secure a supply of better gas at a lower price than can be produced under municipal ownership and operation.

> "Municipal ownership is, therefore, no new or over-radical thing. It is neither socialistic, communistic, nor populistic. It is feasible and practicable. It must be at least reasonably successful. And it cannot be attended with any greater political evils than the no more universal municipal ownership of docks, ferries, bridges, markets and water supply."

Municipal ownership is not socialistic, communistic, nor populistic, *because it has become democratic by adoption.* It has been adopted by the Democratic party as a bait with which to catch the socialistic, communistic and populistic vote in the first municipal election of Greater New York. Under municipal ownership, the political evils that have attended the ownership, construction and management of docks, ferries, bridges, markets and water supply will be magnified by as much as the money to be handled, the material to be continuously consumed, and the

employees to be directed, add to the opportunities for corruption, political patronage, and the power of the machine.

> "The testimony is uncontradicted and beyond attempt at contradiction that municipalization of gas franchises in English and Scottish cities has meant large reductions in prices, substantial profits and better management."

It is not true that the gas service owned or operated by English and Scottish cities has made greater relative reductions in price during the same period of time, or resulted in better management than has been experienced in American cities in the face of vastly unequal conditions. Municipal gas plants when operated for a profit are used as a means of *indirect taxation.* They collect a profit from gas users, and apply it to the reduction of taxes for property owners. If users of gas are satisfied with this, others should be.

> "One other fact concerning British experience—municipal ownership has uniformly brought an improvement to employees in both hours of labor and rates of pay."

But it has not brought the improvement up to the American standard under private corporate ownership, nor does it show any evidence of ever being likely to do so.

> "There is but one thing for us to consider at present, and that is the practical side of the proposition, in view of existing private ownership and the existing indebtedness of the Greater New York. Of course existing property rights must be respected and cannot be confiscated. They can be terminated, as they were in England, by purchase, or else as our laws will permit, by condemnation. But we need not, even if the debt limit would permit, attempt any wholesale and sudden acquisition of all existing franchises for lighting, or any wholesale construction of new plants."

This statement shows that for reaching the debt limit, political corporations are a success. The debt limit is easily reached with only the present municipal objects on which to spend money, and with all of these street monopolies to tax, "strike" and bleed at every point of contact. Where will a debt limit have to be placed to keep it out of the reach of political management when "the people of this metropolis will some day relieve themselves of these street monopolies, will stop this corruption of politics and of public officials, will end this waste of public resources and this daily robbery of the people, which private ownership of street franchises means." What a relief it will be to take all of the gas companies, the electric lighting companies, the street railroad and the elevated railroad companies, the steam heating, telephone and telegraph companies, roll them all into one huge monopoly, add that to the present city business and patronage, and turn the

whole, free of state regulation or supervision, over to corruptible politicians and public officials ! ! The greatness of Greater New York will be great indeed if it can survive such an attempt to lead "the cause of progress and of good municipal government" by going in the wrong direction.

If the debt limit prohibits carrying out this project, is it not the practical side of the question to find some way for getting out of debt? The election of a Mayor pledged to free silver will not do this, because the city found gold the "cheapest money" it could get, and "gold" is written in its bonds.

> "The Greater New York should first try its hand and see how it can make municipal ownership work. Let it follow Detroit's example and construct a small lighting plant, and light only its own streets, or perhaps only a section of them. This would not require the purchase or condemnation of any franchise, nor any expenditure for which the Greater New York could not easily provide, while meeting all other requirements. But the Greater New York owes it to the cause of progress of good municipal government, owes it to her citizens and to herself, to make directly an experiment, on however limited a scale, of municipal ownership and management of street franchises."

The lack of economic sense displayed in this suggestion and appeal is astounding. How can property rights be respected, how can confiscation be avoided in this way? Destroying a business by cutting its heart out, as this proposal will do if acted upon, is both disregarding property rights and an act of confiscation. Not in all England was there ever an attempt to carry out a proposal like this.

The reference to Detroit is most unfortunate. When the act of the legislature was obtained, authorizing Detroit to bond itself for the purpose of constructing a municipal electric lighting plant, an attempt was made to interest its citizens in a movement to have the act set aside on the ground that the evidence furnished to induce members to vote for the bill was insufficient and misleading. Those who should have acted were apathetic, and the masses were overjoyed at the prospect of "downing a monopoly," in which they had the assistance of the press, and the plant was constructed. Not a long time has since passed. Detroit is now giving an account from time to time, of its success in leading the "cause of progress and good municipal government in *experimenting* in the municipal ownership and management of that street franchise." The cost of lighting to the city of Detroit by service from its own plant is to-day greater than it would be under a proper contract with a private corporation. Every estimate on

which the action of the legislature and of the city council was based, showing cost of construction and cost of operation has already been largely exceeded, and the end is not in view. There is no twenty-five year limit in the city's franchise.

Why should New York make an "experiment"? If Philadelphia and all other American cities, if Birmingham and Glasgow, and all other British cities, if all the other cities in Europe, and in other parts of the world, now committed to the "experiment" of proving the ability of political management to use taxpayers' money more economically than private citizens can manage their own cannot do it, how can Greater New York hope to do it? Has the Wigwam a superior brew of brains to exhibit, that it is seeking something worthy of its ability?

These are the reasons given for advocating municipal ownership. What of the movement?

PROGRESS OF MUNICIPAL OWNERSHIP.

"Manchester (England) has operated its gas works since 1824, Philadelphia since 1841."

"Municipal ownership of one or more of these street franchises prevails in over 700 cities, and is authorized by the laws of a score of states and countries."

If this is evidence, then the weight of evidence is in favor of private corporations. Public service corporations for the supply of all public industrial wants prevail in every city in the United States, are authorized by every State in the Union, and every civilized country in the world.

"Gas plants are operated by 168 cities of England and Scotland, including almost every city of consequence, except London; by 888 cities of Germany, including thirty of the largest, such as Berlin, Hamburg and Dresden; by Brussels, by Amsterdam, by many cities in the British colonies, and by twelve American cities, including Wheeling, Louisville, Richmond and Philadelphia. Electric lighting plants are operated by over 200 American municipalities, including Dunkirk in this State (New York), and Jacksonville, Springfield, Little Rock, Topeka, Bay City, Detroit, and Chicago; by many British cities; by some in the Australian colonies; and by thirteen German cities, including Hamburg and Dresden. Street railroads are owned or owned and operated in thirty-three cities of England and Scotland, by some of Germany, Switzerland, Holland and the Australian colonies, by Toronto, and, in a measure, by New Orleans."

Owning and operating these industries is one thing, gaining an economic advantage by so doing, over any other possible solution of the problem, is a very different thing. It is easily shown that in many of these cities, the cost of the service to users is greater under municipal ownership than it would be by contract with private corporations, even under the unwise

conditions now generally forced upon such corporations. It can be shown that in every one of these cities, contracts can be made with private corporations by the terms of which users of the services will be supplied at a lower price than the true cost of production under municipal ownership and operation, provided private corporations are granted the full advantage of every economic condition that accrues to the municipality without cost, by virtue of its being an absolute political monopoly. Reasons for these statements will appear in the examination of the statistical evidence submitted to show the advantages realized by municipal ownership. Before doing this, an examination will be made of the legal and constitutional arguments advanced, and the plea that municipal ownership is not socialistic.

MUNICIPAL OWNERSHIP IS LEGALIZED SOCIALISM.

"The socialist wishes to destroy all individual competition; the advocate of municipal ownership wishes to restore a public enterprise to the public, and to destroy a monopoly, individual competition being already destroyed, or fast and necessarily disappearing."

The specious reasoning of this statement is clearly seen when it is considered that the supplying of gas has never been a public municipal enterprise in the city of New York, therefore, the pretense that this movement is one to "restore" it to the public is false. It is a movement to destroy private ownership, not monopoly. The destruction of private ownership in all its forms is the central principle of socialism and is intended to result, as it must inevitably do, in a political monopoly. The political ownership and operation of all public service industries is demanded by all socialists wherever their views find expression. This movement has now become political through the leadership of politicians, who have studied expediency, party prestige and power; not statemanship, not economic law in its highest and best sense. They have failed to erect true standards for the guidance of the people. Every failure to turn public policy in a right course has served to increase its momentum in a wrong direction. So far as the State of New York is concerned progress towards socialism is recorded as follows:

"Governor Tilden signed the Act which made the Brooklyn Bridge and its railroad a city property and the Courts held it to be constitutional (76 N. Y., 476)."

"Governor Hill signed the Act which authorizes the City of Dunkirk to supply electric lights for its inhabitants, and the Courts sustained that law (49 Hun, 550)."

"Governor Flower signed a law which authorized all villages of this state which had village water-works to construct electric lighting plants, and the validity of that law has never been questioned in the Courts. He afterwards signed the New York City Rapid Transit Tunnel Law which has been upheld (8 App. Div., 280, 152 N. Y., 257)."

"Perhaps these facts may serve as a short answer to any claim that municipal ownership is socialistic, for no one can reasonably consider that a socialistic project has had such support, and for so long a time, in statute law, in the decisions of the courts and actual practice."

Herein is displayed the most subtle and pernicious reasoning with which the minds of the people are being corrupted. Stated in its briefest form it is,—*anything that is made legal is right.* Tested by this dictum all the acts of extortion, injustice and robbery charged with such indignation against public service corporation are right. In the presence of this statement their accusers should be dumb. Their acts are supported "by statute law, by the decisions of courts, and by actual practice." No one can reasonably consider that acts of extortion, injustice and robbery has such support.

On one point this evidence may be accepted as conclusive. It shows there was reason in the expectation of the populists that their demand for the nationalization of telegraphs and railroads would be accepted by the local organizations of the party whose national delegates adopted their platform. This is a natural outgrowth of the approval of the municipalization of industries in measures of expediency uncontrolled by principle. The first step in the wrong direction was approved by Governor Tilden in a seemingly innocent and necessary measure for the municipal operation of a railroad across a public bridge. This has been followed by one step after another until the city of New York voted to bond itself for $50,000,000 to build a system of rapid transit that can be built by private capital, on better terms for the users of the system, without creating one dollar of public debt, if the same franchise conditions are offered to a public service corporation as are assumed by the political corporation by right of governmental monopoly. Made bold by this success the real managers of the political monopoly are now reaching out to absorb all public service industries. The advocates of municipal socialism gloat over the deft way in which they have strengthened their position "by statute law, by the decisions of Courts, and by actual practice." They now throw aside the mask and claim their conquest. Here is the evidence:

"If municipal ownership be socialistic, then New York is already committed to it."

This assertion is based upon provisions in the Charter of Greater New York, quoted as follows:

"Hereafter no franchise or right to use the streets, avenues, waterways or highways of the city shall be granted for a longer period than twenty-five years, with power to provide for optional renewals not to exceed in the aggregate twenty-five years; that, upon the termination of any such grant, the plant and property in the streets shall either become the property of the city without compensation, or be taken at a valuation; and that, if such property becomes the city's, without money payment, the city may either take and operate the said property on its own account, or make a renewal for not more than twenty-five years, or a new lease for not more than twenty-five years; *but that, if under the terms of the original grant the plant and property of the streets become the city's upon payment (in which payment nothing is to be allowed for franchise) the city shall operate the plant and property on its own account for at least five years*, after which it may determine either to continue such operation on its own account or to lease the plant and property for the limited periods in the same manner as it now leases its ferries and docks."

The option provided for extending the life of a franchise twenty-five years is in behalf of the city, not of the operating company. It makes the provision look fair, but does not necessarily defer the time when the politicians may claim their victim. Why a stipulation is made that property may be taken at a valuation, after it has been provided that it shall "become the property of the city without compensation" is not clear.

Fearing difficulties in "re-taking" all outstanding franchises and re-issuing them so as to make them "original grants" of greater New York, a way is shown out of the difficulty:

"It is a Gordian knot which others have cut by means of municipal ownership; by city purchase at an agreed price, as in England, or by condemnation proceedings, as Brooklyn has just done with the Long Island Water Supply Company, and as the recent decision of the United States Supreme Court in the case of that company will permit New York to do with its gas companies."

This completes the shackles that have been forged for enslaving public service industries. Here the burst of admiring exultation with which the advance agents of socialism exhibit their perfect work!!

"*This means municipal ownership as to future street grants, not only as to gas lighting, but as to electric wires in all uses, and as to street railroads, tunnel, surface or elevated.*"

This reveals the scope of the plans for plunder concocted by those who make a business of politics. They have been successfully laid by sagaciously playing one interest against another, while the solid business men of New York have been too busy to give attention to public affairs, and too apathetic to sustain any effort to turn the tide now carrying the people from industrial freedom to the slavery of socialism.

Able business men, who are not close students of correct economic principles, acting on the basis of expediency, have played directly into the hands of the destroyers of prosperity by favoring a scheme of municipal rapid transit, on the plea that it was too large an undertaking for private enterprise, and should be built by the people in the interests of the people. They are now assisting the schemes of economic brigands, by joining in the cry that the city shall "re-take" the franchise of two important street railroad companies, seizing for the purpose an opportunity presented by a proposed change of motive power. Is this the way to encourage public improvements and keep New York in the vanguard of progress? Is this an honest movement to secure a profit for the city? The eminent business men who are lending themselves to it undoubtedly think so, but the crafty men who make political issues know better. The secret source of this movement is in the plans of politicians to "re-take" these franchises for the account of the city and then, by reissuing them under the provisions of the charter of Greater New York, designed to lead to municipal ownership, make them "original grants" under the terms of that charter and place them under sentence of death. Does any one doubt this? Here is the evidence:

> "That New York newspaper which carried clear to the Court of Appeals a three years' contest against the constitutionality of the act authorizing the city to construct the rapid transit tunnel astounded the advocates of municipal ownership the very week of the final decision which sustained the law, by urging the repurchase by the city of the Sixth and Eighth Avenue Railroad franchises with the plants in use, because, by such purchase, and by letting out the franchise and plants, the city could secure a large profit."

This alleged reason is a false pretence. "Letting out the franchise and plants" is not municipal ownership and operation. This is not the reason why every victim of economic fallacy of municipal ownership is so exultant over this adroit move. It is because the franchises once recovered by the city, can be issued as "original grants" under a city charter that means "the municipal ownership as to future grants, not only as to gas lighting, but as to electric wires in all uses, and as to railroads, tunnels, surface or elevated." Let this point be gained now, and a new link in the chain of "statute law, decisions of courts, and actual practice" will be forged to bind public service industries to the triumphal car of progressive socialism. Telegraphs, tele-

phones, electric railroads, electricity for light, heat and power, the gas supply, elevated railroads, every public service industry is doomed by the success of this move, not only in New York, but for the whole country, yet men who regard themselves as oracles of sound business sense are being used as cat's paws in the interest of these socialistic schemes, because of their superficial method of dealing with grave questions of public policy from considerations of expediency, rather than a basis of correct economic principles.

The blackest transactions in human history are those of slaveholders selling their own children into slavery for the sake of a profit. Not less abhorrent, in an economic sense, is the act of a municipality when it sells public service franchises for a profit, to put money into its treasury. The true value of a franchise is in the power it gives to a municipality to contract for the satisfying of wants common to all its inhabitants on terms that will guarantee the best service known to the art at the lowest profitable price to users. Such a contract cannot be made by increasing the cost of operation and necessary capitalization, by taxing or selling the franchise.

TAKING THE QUESTION INTO POLITICS.

The ballot box is the court of final appeal. Constitutional arguments or legal precedents cannot permanently bind a people who have the power to make any policy they wish to carry out constitutional and legal, if they want it earnestly enough, and insist on having their way long enough. For this reason every question of social reform is predestined to get into politics.

Those who work for the reformation of municipal affairs but follow the order of nature when they take the question of the municipal ownership of industries into politics, especially after one of the great national parties is committed to the same policy in the larger sphere of interstate transportation of persons and property, and the electrical transmission of intelligence. In doing this they are not without an English precedent. Here it is:

> "London alone stands under the rule of private monopolies, and municipal ownership is making headway there, for the progressive or liberal party is doing what we must do here—it is taking the question into municipal politics."

Complaint is made that private corporations influence political action and for this reason that they should be demolished.

But a yet deeper immersion of these interests in politics is undertaken when they are made the objects of political ownership and operation.

Here is the secret of the whole matter: Politicians want something to live on, and they must have "issues" to win on. For the sake of this they do not hesitate to attack existing interests unjustly; to excite the prejudices and passions of those they should correctly educate; to madden the victims of unrest with envy, hatred, a sense of injustice and wrong; and to join under cover of a municipal issue, the forces pledged to the destruction of the nation's credit. For the sake of grasping power politicians do not hesitate to cajole the people with deceptive visions of public profits, which if ever made must be made out of the pockets of the people; to prejudice their judgment with cries of "daily robbery" by corporations, and frenzied demands that monopolies must be crushed, keeping from view the fact that their object is to secure the revenues and patronage for a political monopoly, and they debauch the minds of the people with visions of impossible advantages to be gained for them by overturning the existing gold standard and industrial system for operating public service industries, to try an "experiment" in the "free coinage of silver," and the municipal ownership and operation of telegraphs, telephones, street railroad, gas and electric light and power services. Socialistic views of economic fallacies have worked in political thought and literature, and the rewards of political preferment and official patronage have gone to those who place party expediency above a sound public policy, until the entire body politic has become diseased. Under these conditions the issue of municipal ownership of public service industries is put forward in municipal politics as a pledge of good faith for the support of national ownership of such industries in national politics, and the intelligence of the people is tested by the claim that "it is not socialistic, communistic, nor populistic, but feasible and practical"—by making it democratic it is all right.

RESULTS OF MUNICIPAL OWNERSHIP: STATISTICAL EVIDENCE.

The statistical evidence given to prove advantageous results from municipal ownership is unfair, unreliable and inadequate.

The statistics are unfair, because all the elements of cost entailed upon public service corporations by acts of legislatures

and municipal councils, are not added to the cost of municipal production, or deducted from the price charged by public service corporations in order to make the comparison equitable. A municipality cannot tax itself, nor is its property taxed by the State. It cannot sell a franchise to itself nor charge a tax upon its gross receipts. It cannot make a gain for taxpayers by decreasing the cost of street improvements, repairs or cleaning, through assessing a portion of the cost upon gas supply or street railroads, that may be owned and operated by it. It does not permit competition in its industries from any source. It permits no "raids" by rivals. It places no limit on the duration of its franchises, nor does it impose upon itself any of the conditions found in the Greater New York Charter providing for the forcible closing out of its business. It makes no annual "bids" for public street lighting, or other service rendered for the account of the municipality. It pays no license for the cars it may operate, for permits to open streets, extend its service or for privileges of any kind. It has no expensive conflicts with the municipal councils, nor is it compelled to maintain a lobby, resort to bribery, give interests in stocks or bonds to politicians, or fee able attorneys to watch "strikes" in the legislature or council, and to resist unjust taxation. It does not have to "fight" to obtain new legislation or ordinances before it can extend or improve its service, or make changes in its motive power. These suggested disabilities under which every public service corporation operates to a greater or less degree, none of which inhere in the conditions imposed upon municipalities, tend to increase capitalization, increase rates of interest and the cost of operation, through fixed charges or otherwise, and correspondingly to increase the necessary price charged users for the service rendered. The influences of these various conditions and limitations may all be valued and stated under one heading "taxation." The advantages of a service to users, to taxpayers and to the general welfare of a municipality rendered at a price in which there is no element of taxation, far overbalances any advantages derivable by the same parties from the same service at the same price *increased by the amount of any or all elements of taxation.* The lower the price, the greater the value of the unpaid for increasement that enriches the pocket of every user, and enhances the value of property for every taxpayer. To make comparisons fair, a sum

for accidents, contingencies, depreciation, taxation and interest on investment should be added to the cost of production in municipal accounts, or deducted from the prices charged by public service corporations. This is not done in any of the statistical evidence submitted.

The statistics are unreliable, because there is no guarantee that all items of cost are correctly charged against the service in municipal accounts. Interest, depreciation, repairs, contingencies, insurance, etc., are heavy items of expense. When the service is rendered by a public service corporation at a fixed price, that price limits costs to users of the service and to taxpayers. When it is rendered by a municipality, if the income collected does not cover cost of production, the difference comes out of the taxpayer's pocket in some way. Under private ownership taxpayers and users are interested only in the price charged for the service. Under municipal ownership taxpayers and users are interested in every element and item of cost of construction, maintenance and operation. If all the charges are not fully, accurately and simultaneously stated, the results shown are not reliable, and a public policy based on them leads to disaster.

The statistics are not adequate, because they make no allowances for differences in local conditions as they exist at the places between which comparisons are made, such as, in the case of gas supply, cost of capital, construction, material and labor, value of residual products, quality of gas delivered, volume of output and area served. Before a fair comparison can be made, differences in these elements must be valued and allowed for, by adding to one or deducting from the other.

During years of discussion, advocates of municipal ownership have never attempted to prove their case by presenting proper statistics covering the experience, for a single decade, of any number of municipally-owned and operated plants, thus challenging a comparison with the results of private ownership which they decry and seek to displace. Until they do this they cannot reasonably expect their representations to have weight with the intelligent. Until they can satisfy the intelligent, they ought to refrain from misleading the uninformed.

UNRELIABLE STATISTICS.

PARIS *vs.* NEW YORK AND BROOKLYN.

"A concrete standard of municipal regulation will here be useful for intelligent comparison. Let us visit Paris, lighted by a private company, and said by Dr. Shaw to be 'the most beautifully illumined of all large cities.' There is but one gas company, because it has been recognized in Paris that 'a consolidated gas supply can be more economically produced and sold.' * * * The capitalization of the company is fixed as 84,000,000 francs (less than $17,000,000). * * Gas for public lighting, one-fifth of the total supply, is furnished at cost. Capital stock cannot be 'watered,' dividends are fixed, and profits above the maximum are divided between the stockholders and the municipal treasury. At the expiration of the charter in 1910 the franchise and plant revert to the city; meanwhile the annual public revenue from gas lighting approximates 20,000,000 francs, or $4,000,000.

Now Paris contains about as many inhabitants as New York (unconsolidated) and Brooklyn, and has about half their acreage, yet the capital stock of New York and Brooklyn gas companies exceeds $65,000,000, besides $30,000,000 of bonds, a total capitalization of over $95,000,000, or *nearly six times that of the Parisian company*. We may stop right here. For the purpose of considering what is intelligent and fair regulation, and whether or not it be possible, it makes little difference that this clearly excessive capitalization in New York and Brooklyn may be representative of dead and consumed capital, antiquated and cast aside appliances, or may be all water, or all capitalization of franchise (either of which should be deemed a financial crime); or in part one and in part the other." * * *

Paris allows its company 13½% profit upon its 84,000,000 francs, which amounts to $2,240,000 a year. Let us concede to the New York and Brooklyn Companies twice this, or $4,480,000. Surely that will be more than liberal. But they actually pay, *in dividends and interest*, about $6,800,000. The excess of about $1,800,000 represents a capital of $36,000,000, which may serve as an indication of the value of the privilege (franchise) which our gas companies enjoy."

It would be difficult to give more misinformation in the same space than is conveyed in the above quotation. Some years ago Dr. Albert Shaw published an article in the *Century Magazine* under the title of "Paris a Model Municipality." In that article he attempted to give a statistical analysis of the accounts of the Paris Gas Company, and made certain deductions which he recommended to the earnest consideration of American readers. Noticing that he had made a slight error of about $40,000,000 at the outset of his calculations, which detracted somewhat from the value of his deductions, I wrote an article under the title of "A Plea for Truth in Statistical Literature," to correct Dr. Shaw's errors, in which I gave a complete analysis of an annual report of the Paris Gas Company, and offered it to the *Century*

Magazine, hoping to neutralize the miseducation Dr. Shaw's article was disseminating. My article was rejected. The truth being suppressed, the error has been perpetuated, and is reproduced in the paper I have under examination. I will now make another attempt to correct the error.

The statistical statements made in the above quotations about the conditions in Paris, and in New York and Brooklyn follow:

Paris:—Capitalization fixed—no water—84,000,000 francs, under $17,000,000. Dividend fixed at 13⅓%, $2,240,000. Profit above the maximum divided between stockholders and municipal treasury not given. Charter expires 1910, then franchise and plant revert to city. Meanwhile annual public revenue from gas lighting approximates 20,000,000 francs, or $4,000,000. Inhabitants equal to New York (unconsolidated) and Brooklyn; acreage about one-half of New York and Brooklyn.

New York and Brooklyn:—Capital stock, $65,000,000 (plenty of water). Bonds, $30,000,000. Total capitalization, $95,000,000. Allow for dividends *twice the Paris dividends*, $2,240,000 × 2 = $4,480,000. Actual payment of *dividends and interest*, $6,300,000. Excess over Paris "dividend" only about $1,800,000. This represents a capital of $36,000,000, which may serve as an indication of the value of the franchises for New York and Brooklyn.

The data used in the comparisons which follow are copied from *The Reports and Accounts of the Paris Gas Company for the year 1892* (if I remember rightly, this is the period covered by Dr. Shaw's article), as published in the *Journal of Gas Lighting and Water Supply*, London, May 9, 1893:

CAPITALIZATION.

Paris.	Share Capital	84,000,000 francs.	$16,800,000
	Bonds	221,185,689 "	44,287,188
	Total Capital	$305,185,689 francs.	$61,087,188
	Capitalization as stated in quotation.	84,000,000 francs.	$16,800,000
	Capitalization as given in Report—	305,185,689 "	61,087,188
	Error	221,185,689 "	44,287,188
	This is Dr. Shaw's error. The above quotation gives the capital at about		$17,000,000

DIVIDENDS.

Paris Official Reports.	Dividend (fixed allotment).....	11,200,000 francs.	$2,240,000
	Half of divisible balance.....	11,600,000 "	2,320,000
	Total Dividend	22,800,006 francs.	$4,560,000
	As stated in quotation.....	11,200,000 "	2,240,000
	Error.....	11,600,000 francs.	$2,320,000

"We might stop right here," but we won't.

DIVIDENDS AND INTEREST.

Paris Official Report.	Total dividends	22,800,000 francs.	$4,560,000
	Interest on loans...	8,365,873 "	1,673,174
	Total dividend and interest.....	31,165,873 francs.	6,233,174
	Loan Redemption Fund	8,632,550 "	1,726,510
	Share " "	2,620,000 "	524,000
	Total payments on Capital.... ...	42,418,423 francs.	$8,483,684
New York and Brooklyn.	As stated in quotation.....		$6,300,000
	Error—Paris in excess of New York and Brooklyn by...		$2,183,684
	Instead of New York and Brooklyn exceeding Paris by.		1,800,000

The excess of Paris payments on capital over the total payments made by New York and Brooklyn, of $2,183,684, represents a capital of $43,673,680, which may serve as an indication of the value received for the privileges by the municipalities of New York and Brooklyn from a system of private ownership. Misled by unreliable statistics, the advocates of municipal ownership have not discovered this fact. This has caused them not to see that, through lower exactions for capital, the users of the service and the taxpayers are as well off as they would be if the franchise was valued at $40,000,000 and the companies taxed 5% on that valuation, and in consideration therefor permitted to charge a price for the service that would enable them to make the same deductions for capital as are made in Paris.

TAXATION.

Municipal Charges.

Paris Official Report.	Tax of 2 c. per cub. met. of gas sold	5,376,209 francs	$1,075,242
	Rent of sub-soil occupied by Mains	200,000 "	40,000
	Lighting, extinguishing and maintenance of public lamps (less amount paid by municipality)	1,214,364 "	242,872
	Half of divisible balance	11,600,000 "	2,320,000
	Total payment of municipality	18,390,573 francs	$3,678,114
	State charges, gas testing, stamps, etc	1,077,154 "	215,431
		19,467,727 francs	$3,893,545
	As stated in quotation, municipality tax	20,000,000 francs	$4,000,000
	As stated in official report	18,390,573 "	3,678,114
	Error	1,609,427 francs	$321,886

REPRESENTATIONS REGARDING CAPITALIZATION.

Total capitalization, New York and Brooklyn	$95,000,000
Total capitalization, Paris; official report	61,037,138
Excess, New York and Brooklyn over Paris	$33,962,862

The capitalization of New York and Brooklyn is only about *fifty per cent.* greater than that of Paris instead of being *six hundred per cent.* greater, as stated in quotation. Error, *five hundred and fifty per cent.*

The acreage of New York and Brooklyn is twice that of Paris. If a New York plumber should estimate the necessary increase of capitalization for Paris, to pipe twice its present acreage, he would bring the Paris capitalization, on basis of territory supplied, far above the capitalization of New York and Brooklyn. How far, I dare not suggest.

MINOR ERRORS.

The contract with the Paris Gas Company expires in 1905 instead of 1910, as stated in the quotation. When the Paris contract expires, the "franchise and plant" *will not revert to the city without compensation*, as many advocates of municipal ownership have represented. Redemption funds for share capital, as well as loaned capital, are provided for *as a part of the expense of operation*, before dividends of any kind are made. In addition to this, negotiations between the company and the

municipal council are pending to provide for a new contract, or the purchase of the property by the municipality on the expiration of the existing contract in 1905.

The price of gas to users in Paris is 30 c. per cub. met., and to the city, 15 c. per cub. met. This is at the rate of $1.699 per 1,000 feet to users, and 84 9/10 c. to the city.

Price of Gas, Paris.....	$1.699
Price of Gas, New York and Brooklyn.....	$1.250
Difference in favor of New York and Brooklyn.....	$ .449 per 1,000 ft.

This is an unpaid increment of 36 per cent. in favor of New York and Brooklyn, as compared with Paris, which "touches the pocket of every gas user to this extent in the amount of his gas bills." This is all the advantage the advocates of municipal ownership are demanding.

THE REASON FOR IT.

In speaking of the price of gas the Report of the Paris Company says:

> "If the consumers in Paris pay more for gas than those in Vienna, Berlin, etc., it is because the municipal authorities draw from them (the consumers), through the medium of the company, a number of dues, the total of which amounts to nearly *one-third of the price charged for gas supplied to private consumers.* This is the cause of the high price of gas in Paris, and the reason for the difficulty which attends any reduction therein."

This is a complete confirmation of my contention that the difference in the price of gas to consumers, between municipal charges and the charges made by public service corporations can all be accounted for by the absence of exactions in the case of municipal plants that are entailed upon private plants by taxation, legislation, ordinances and politicians, and not by virtue of any economic advantage inherent in municipal ownership. Relieve public service corporations from these exactions, and the reductions they will voluntarily make in consideration therefor will "touch the pocket of every gas consumer to the extent of from twenty to forty per cent. of his gas bills." This is an easy way for municipal reformers to gain all the advantages the advocates of municipal ownership represent it is possible to secure by the municipalization of the gas supply.

ANOTHER ERROR, LOUISVILLE.

In referring to the municipal gas works in the United States, the following statement is made:

> "Gas plants are operated by * * * 12 American cities, including Wheeling, Louisville, Richmond and Philadelphia."

Brown's Directory of American Gas Companies for 1894 gives the information which follows regarding the gas works in Louisville, Ky.:

> Capital Stock..... .....$3,000,000
> Total bonds outstanding..... 500,000
> President, George W. Morris.
> Secretary, E. S. Porter.
> Treasurer, W. P. Lee.
> Purchasing Agent, A. H. Barret.
> Process of manufacture, Coal and Lowe.
> Population 200,000.
> Average price of gas 1894, for light $1.80, for fuel 75 cents.
> Approximate annual output, 360,000,000.
> Candle power, 20.
> Proportion sold for fuel purposes, 12%.
> Lowest pressure available for gas, stoves 1.2 in.

This statement for the Louisville Gas Company shows that the Louisville Gas Works if ever owned by the municipality, are now operated by "daily robbers."

UNRELIABLE STATISTICS, PHILADELPHIA.

Philadelphia has owned and operated municipal gas works since 1841. To-day it manufactures about 60 per cent. of the gas supply. It purchases about 40 per cent. from a private corporation at 37 cents per 1,000 feet delivered in the holder. The statistical representations made regarding the results of its municipal ownership, are:

> "In 1895, the net balance of receipts, $3,155,956.47, over disbursements, $3,985,518.85, plus improvements, $54,589.59, was $115,853.03, and the city used free $638,494 worth, making a total profit to the city of $754,347. Reckon Philadelphia gas at $1.25 a thousand, however, the price charged here (New York and Brooklyn) and you will find that the people saved $788,987 in their gas bills as compared with New Yorkers, while what the city's street lights would have cost at $1.25 a thousand would have been $798,117, and those two items plus the $115,853, balance left in the city treasury, or a grand total of $1,702,100, represent the difference in cash saving for the year 1895 for Philadelphians by reason of the fact that their city supplied gas at $1.00 and that they did not have to pay the New York price of $1.25.

From a statement, "*The Philadelphia Gas Works*," compiled and prepared by John W. Baker, under date of May 2, 1896, the following data are taken:

"Cost of Manufacturing and Delivering Gas (by Philadelphia Works) for the year of 1895.

Current expenses including gas purchased	$2,965,513.85
Decrease in coal, coke and residuals on hand	52,301.58
Total expenses and material	$3,037,815.43
Credit, sale of coke and sundry receipts	342,479.26
Operating cost	$2,695,336.17
For maintenance and extensions	378,150.00
For interest on value of plant $20,000,000 @ 3½ %	700,000.00
Total cost of manufacturing and delivering gas	$3,773,486.17

Amount of gas delivered, all purposes: 3,420,611,685 cubic feet. Cost to the city for every 1000 cubic feet delivered, *one dollar ten and two-tenths cents.* Price at which gas was sold, *one dollar* per 1000 cubic feet.

Sold	Cubic ft. 2,744,496,900	Loss....	$279,988.68
Street Lighting	" " 520,707,106	Cost....	573,819.23
Public Buildings	" " 144,627,099	"	159,379.06
Total Cost and Expense to the City			$1,013,186.97

So that we arrive at the interesting information that in 1895 it cost the city of Philadelphia $1,013,186.97 for the gas which the city used for its street lighting and public buildings, and yet the public has been informed by the report of the Director of Public Works that by the operation of the gas works the gas used by the city for street lighting and for its public buildings has *not cost the city a cent*, and in addition to that the city has made a profit out of the gas works of over $115,000 in a year."

The above estimate is not all-inclusive. Official reports show additional expenses, as follows:

Bureau of Street Lighting	$205,246.00
Receiver of Taxes (Collecting of gas bills)	73,571.06
Controller's Office (Gas Auditors)	6,000.00
Director's Office (¼ Salaries)	4,447.50
Cost of Manufacturing and Delivering	$3,773,486.17
Total Cost and Expense	$4,062,750.73

This increases the cost to $1.187 per 1000.

It will be observed that no amount has been included in these figures to cover the taxes a public service corporation would have to pay. Advocates of municipal ownership estimate the value of the gas franchise for New York and Brooklyn at $40,000,000, and that the city should receive an income from this source of 5% on the value of the franchise, or $2,000,000. Estimating this condition for Philadelphia at one-half the claim for New York and Brooklyn, franchise $20,000,000 @ 5% tax = $1,000,000. This will

increase the cost by .292 cents, making a total cost of gas manufactured and delivered from the municipal works of Philadelphia under conditions which the advocates of municipal ownership declare should be exacted from public service corporations in New York and Brooklyn, $1.479 per 1000 feet.

The price of gas in New York and Brooklyn is now $1.25 and in Philadelphia $1.00 per 1000 feet. There are two ways of adjusting this difference:

First.—Make the exactions demanded by the advocates of municipal ownership and authorize the public service corporations to increase their price from $1.25 to $1.479 per 1000 feet. Every user of gas can understand this.

Second.—Consolidate the companies into one corporation, as is the case in Philadelphia, grant it a franchise which shall be a duplicate of the one enjoyed by Philadelphia, relieve it of all state, county and municipal exactions not made of the Philadelphia municipal works, and require the corporation, in consideration thereof to supply gas to users at $1.00 and to the city for public uses at 50 cents per 1000 feet. *Every gas user can understand this.*

There is a feature brought to light in this very brief examination of Philadelphia conditions that should be emphasized and repeated until it arrests the attention of every voter in the United States. It is this: *Public Accounts are not kept to show all items of cost as they should be shown for proper comparisons to be made the basis for guiding public policy. The fundamental basis for all municipal reforms is correct accounts and records.* The truth must be known or falsehood will darken reason.

UNRELIABLE STATISTICS, DUNKIRK, NEW YORK.

To illustrate how the virus of misinformation works in the blood of the body politic, it may be stated that the town of Dunkirk, N. Y. installed the electric lighting plant it was authorized to own and operate by act of the legislature approved by Governor Hill. That act made no provision for proper accounting for the purpose of correctly informing other cities of the state and country regarding the results of the "experiment." In the course of time "official" statements were published showing that the municipal plant of Dunkirk was producing

electric arc lamps for street lighting at a cost of $40 per year. As the average price for that service by public service corporations is over $100 per year, this statement was eagerly seized upon by all advocates of municipal ownership, the public press, and politicians who wanted to gain votes by decrying the extortions and robberies of monopolies. This "official" statement was used to induce members of the New York legislature to enact the law approved by Governor Flower "authorizing all villages of this state (New York) which had village water works to construct electric lighting plants." It was used to induce members of the Michigan legislature to enact the law authorizing Detroit to construct electric lighting plants. It has been used to induce members of legislatures and municipal councils to authorize the municipal ownership of every one of the 125 municipal electric lighting plants in the United States. And Dunkirk is selected for special mention out of this number in the paper I have under review. This "official" statement has cost investors in gas supply and electric lighting service a thousand times the value of the Dunkirk plant and its work of destruction is not finished.

What are the facts? About 1892, I sent an expert electrical engineer and accountant to examine the plant and accounts of the town of Dunkirk and make a statement adjusting the accounts under the application of the same rules formulated for private companies. The result of this adjustment showed that instead of a cost of $40 per year, the arc lights in the town of Dunkirk supplied from the municipal plant were then costing $106.00 per year.

UNRELIABLE STATISTICAL DEDUCTIONS.

As a concluding examination of the data submitted to prove the economic advantages of municipal ownership, attention is called to the statements made regarding Wheeling, West Virginia, Richmond, Va., Birmingham, where the price has been reduced from 76 to 55 cents (33%); Manchester, Edinburgh, and "the most notable of all"—Glasgow, where the price of gas has been reduced in twenty-five years from $1.14 to 60 cents (47.4 per cent.), when a climax is reached by the exclamation,—"The record of Glasgow puts this American city (New York) to shame."

In 1869 the price of gas in New York was $3.50. It is now

and has been for several years $1.25, a reduction of 64.3 per cent., against the reduction in Glasgow of 47.4 per cent. during the same time.* A New Yorker should be ashamed to so misrepresent the good fame of any industry in his city as to claim superior results for Glasgow in the face of a fact like this.

Users of gas know how to appreciate reductions in price, and know that a reduction of 64.3 per cent. will beat 47.4 per cent. all the time.

The people are told that:

> "The question (of municipal ownership) is not one for property owners and taxpayers alone. It touches the pocket of every gas-user to *the extent of from twenty to forty per cent. of his gas bills.* It reaches every inhabitant of the city who is now, for economy's sake, compelled to use oil-lamps, and who would be more comfortable, happier and healthier if gas were cheap enough for him to use. And cheaper gas could be used for fuel, to the saving and untold comfort of the dwellers in New York's crowded apartments and tenements, for it has been the experience of Glasgow that in this direction its municipal management was able to cause a doubling of the consumption of gas. It is a question which concerns every taxpayer, every voter and every inhabitant of the city."

This is the final appeal made to induce the people to demand and vote for the municipalization of the gas supply by Greater New York. It offers reduced price for gas as a consideration for votes, and represents that the reduced price is dependent upon municipal ownership and operation. The party making this appeal is not consistent. In national politics it offers as an inducement for votes "free silver" to *raise prices*, and to enable debtors to pay their debts in "cheap money" on the one hand, and on the other, the nationalization of railroads and telegraphs, to rescue the people from the "extortions and daily robbery" of grasping soulless corporations. To make a municipal issue, in exact accord with the National Democratic platform, Democrats of New York bring forward a demand for the municipalization of the gas supply, electric light, heat and power; telegraphs; telephones; railroads on the surface, railroads above the surface, railroads below the surface, railroads wherever they can be found, and all other street franchises. They seek to delude the people into voting their ticket by repeating in municipal politics, the representations made by party managers in national politics. They proclaim their unselfish and patriotic desire is "to end the waste of public resources and the daily robbery of the people which private ownership of street franchises means." This is their war cry. To show the people how they are being

* The price of gas in New York was reduced to $1.20 per 1,000 feet, May 1, 1897.

robbed they give glowing accounts of the "profits" earned for municipalities, and the enormous savings effected for users of gas by reductions in price made by municipal plants. *These representations are not reliable.* There is not a municipal plant in existence that a public service corporation would not purchase today, at the actual present value of the property, under a contract to supply users with the best service known to the art, at a price *no greater than the correct cost of production under municipal ownership and operation*, all economic factors accruing to the municipality by reason of its political monopoly, to accrue to the private corporation on the same terms. This being true, every representation showing an advantage to users of the service, and to taxpayers, as a result of municipal ownership is untrue.

Here is evidence:

Philadelphia has owned and operated its gas works since 1841. Every expert examined in recent investigations, except those employed by the city, testified that the *cost* of the gas delivered to consumers was *more* than its selling price, $1.00 per 1000 feet. They claimed that the loss on the business for 1895 was from $600,000 to over $1,000,000. Chief Park, who has been in charge of the works 34 years, testified that a profit of $200,000 was made in 1895. He also declared that if the city would spend $2,800,000 for improvements, *it could supply good gas economically;* that he had been trying for 3 years to get a 36-inch main from Point Breeze to the Ninth Ward Works at a cost of $200,000; that owing to bad and irregular sized mains, the pressure around Broad and Market streets is $\frac{8}{10}$ in. or $\frac{9}{10}$ in. while at the Ninth Ward Works, $\frac{1}{2}$ mile away, it is $4\frac{1}{10}$ in.; that by spending $60,000 a year for three years in the old part of the city, 7% could be saved on leakage, which is now over 20% (while in well conducted private works it is not over 6%); and that the reason given by the Council for not making the improvements recommended in annual reports and special communications is, that *there is no money*, adding regretfully, "It would certainly pay a great deal better to give us what we ask than to have the plant in the condition it is." Confirming this, one of the leading papers of the city, one that is favorable to municipal ownership of the gas works, declared editorially, while the investigation was in progress:

"In nothing have the City Councils shown greater disregard or greater contempt of public opinion than in their treatment of the supply of lighting for the municipality and the consumers in general. Notwithstanding the earnest protestations of the Mayor, Councils have refused to appropriate sufficient money to rehabilitate the gas works."

Here is the manager of a plant claimed by the Mayor to be worth $30,000,000, who, without paying taxes in any way, without allowing anything for interest on the investment, without paying a percentage of gross receipts as compensation for a franchise, claims a profit of only $200,000. In the same breath he declares that, "by spending $60,000 a year for three years, he could make a saving of 7% in leakage," but Councils refused to make the appropriation because *there was no money.* Where *is* this profit of $200,000? Why could it not be used to lay the 36-inch main from Point Breeze to the Ninth Ward Works? Why could not the $60,000 per year wanted "to save seven per cent. on leakage" be paid out of it? Simply because there is no account with $200,000 to its credit and the money in bank to be drawn upon for these, or any other purposes. Why are not the people of Philadelphia "more comfortable, happier and healthier" and in the full enjoyment of "the untold comforts" offered to "the dwellers in New York" as an inducement for their vote for the municipalization of the gas supply? Because there are upwards of 200,000 service pipes in the city of Philadelphia, a very large portion of which are only three-quarter-inch, which are entirely inadequate for supplying light alone to most of the houses, and which entirely prevent the use of gas for heating the houses. In the city of New York no service pipes are laid of less size than *one and one-half inches.* This has been the practice for years.

It is stated by the Director of Public Works of Philadelphia that during the nine years he has had the management of the gas works, "there has been a profit to the city from their operation of $1,882,639.61, besides furnishing the city with gas for its own use for street lighting and public buildings *without cost.*" During *seven* of these nine years the price of gas was $1.50, while it was but $1.25 in New York.

Mr. John W. Baker says: "If the price of gas during that time had been $1.00, as it is now, the city would have received $7,000,000 less money than it did. This would have made a loss of $5,117,360.39, *without charging interest.* Interest during these nine years would have amounted to $11,417,360.39, or $1,266,373.38 a year. By charging interest, with gas at $1.00, the gas for street

lighting and lighting of public buildings during the last nine years would have cost the city $1,266,373.38 per annum."

It may be added that the city of Philadelphia did not have to pay a bribe of from $50,000 to $75,000 for a street lighting contract which the advocates of municipal ownership claim was paid in Brooklyn. But the advocate of municipal ownership asks the people of New York and Brooklyn to believe that :

> " A grand total of $1,702,100 represents the difference in cash saving for the year 1895 for Philadelphians by reason of the fact that their city supplied gas at $1.00 and that they did not have to pay the New York price of $1.35."

This representation has the same value as the " Concrete Standard of Comparison " furnished when we were invited to visit Paris, and *no more.*

REDUCTION IN THE PRICE OF GAS, A CHALLENGE.

Advocates of municipal ownership who claim that " *The cost of gas is with most people the controlling argument in favor of municipal ownership* "; *that* " *this daily robbery of the people, which private ownership of street franchises means* * * * *touches the pocket of every gas user to the extent of from twenty to forty per cent. of his gas bills* " are challenged to supply data showing reductions in the price of gas as a result of municipal ownership, to compare with the tables herewith submitted, Nos. 1, 2 and 3.

These tables give the price of gas for every city in the United States, the population of which, in 1869, gives it a place in one of the groups.

The prices for 1869 are taken from a compilation made by Messrs. F. & J. Rives and George A. Bailey, reporters and printers of the debates of Congress published at Washington, D. C., January 1st, 1870, under the title of : " Prices of Illuminating Gas (United States Tax Included), in the Different Cities and Towns in the United States."

The tax in 1869 was :

200,000 cu. ft. per month and under.....10 cts. per 1000
200,000 to 500,000 cu. ft. per month.....15 " " "
500,000 cu. ft. per month and over.....20 " " "

The tax was discontinued August 1, 1872. The price of gas for all cities in the same class was affected uniformly by the tax.

REDUCTIONS IN THE PRICE OF GAS, 1869 TO 1893.

TABLE No. 1.

Population, 400,000 and over.		Price for Gas.		Reduction.
City	State.	1869.	1893.*	Per cent.
1. New York,	N. Y.	$3.50	$1.25	64.3
2. Chicago,	Ill.	3.75	1.15	69.3
3. Philadelphia,	Pa.	2.55	1.00	60.8
4. Brooklyn,	N. Y.	3.25	1.25	61.5
5. St. Louis,	Mo.	4.50	1.18¾	73.6
6. Boston,	Mass.	3.25	1.00	69.2
7. Baltimore,	Md.	3.25	1.25	61.5
Average		$3.43	$1.15	65.6

TABLE No. 2.

Population, 100,000 and under 400,000.		Price for Gas.		Reduction.
City.	State.	1869.	1893.	Per cent.
1. New Orleans,	La.	$4.00	$2.00	50.0
2. Cincinnati,	Ohio	2.62	1.00	61.8
3. Cleveland,	Ohio	2.50	.80	68.0
4. Buffalo,	N. Y.	3.30	1.00	69.4
5. Pittsburg,	Pa.	1.85	1.00	44.9
6. Washington,	D. C.	3.25	1.25	61.5
7. Detroit,	Mich.	3 70	1.00	72.9
8. Milwaukee,	Wis.	4.50	1.00	77.7
9. Newark,	N. J.	3.42	1.34	60.8
10. Jersey City,	N. J.	3.50	1.75	50.0
11. Louisville,	Ky.	3.15	1.30	58.7
12. Rochester,	N. Y.	3.50	1.25	64.3
13. St. Paul,	Minn.	5.55	1.50	73.0
14. Providence,	R. I.	3.20	1 20	62.5
15. Indianapolis,	Ind.	3 00	1.25	58.3
16. Allegheny,	Pa.	2.07	.95	49 2
Average		$3.32	$1.22	63.3

* The prices for 1893 are taken from Brown's Directory of American Gas Companies for 1894.

TABLE No. 2.

Population, 50,000 and under 100,000.			Price for Gas.		Reduction.
	City.	State.	1869.	1898.	Per Cent.
1.	Albany,	N. Y.	$3.75	$1.70	54.1
2.	Columbus,	Ohio	3.00	1.00	66.6
3.	Syracuse,	N. Y.	3.50	1.20	80.0
4.	Worcester,	Mass.	3.70	1.40	62.1
5.	Toledo,	Ohio	3.33	1.00	70.0
6.	New Haven,	Conn.	3.33	1.50	58.0
7.	Paterson,	N. J.	4.00	1.75	56.2
8.	Lowell,	Mass.	3.50	1.10	68.5
9.	Nashville,	Tenn.	3.60	1.50	58.3
10.	Scranton,	Pa.	4.50	1.10	75.3
11.	Fall River,	Mass.	3.50	1.60	54.3
12.	Cambridge,	Mass.	3.95	1.29	67.3
13.	Atlanta,	Ga.	5.15	1.00	80.5
14.	Memphis,	Tenn.	4.70	1.75	62.7
15.	Wilmington	Del.	3.00	1.12½	62.5
16.	Dayton,	Ohio	3.75	1.10	70.7
17.	Troy,	N. Y.	3.75	1.75	53.3
18.	Grand Rapids,	Mich.	4.00	.90	77.5
19.	Reading,	Pa.	3.50	1.60	54.3
20.	Camden,	N. J.	4.00	1.24	69.0
21.	Trenton,	N. J.	4.00	1.70	57.5
22.	Lynn,	Mass.	4.50	1.35	70.0
23.	Hartford,	Conn.	3.33	1.40	51.9
24.	St. Joseph,	Mo.	5.50	1.00	81.8
25.	Evansville,	Ind.	3.70	1.25	66.2
		Average	$3.86	$1.33	65.5

The only municipal plant mentioned by my opponent that falls within the scope of these tables is, Philadelphia in table No. 1. The efficiency of municipal ownership to stop the "daily robbery of gas users" is graphically shown by a "Concrete Standard of Comparison," which has been found without "visiting Paris."

"A CONCRETE STANDARD OF COMPARISON."

Reductions in the price of gas which "touch the pockets of every gas user to the extent of" *the reduction:*

TABLE NUMBER ONE.

Philadelphia—Municipal ownership	60.8%
Brooklyn—a "daily robber"	61.5%
New York—a "daily robber"	64.3%
Glasgow—"the most notable of all" municipal plants	47.4%
Average for the group—6 "daily robbers" and 1 municipal plant	65.6%

TABLE NUMBER TWO.

Average for the group, 16 "daily robbers," no municipal plant	63.3%
Glasgow, "the most notable of all" municipal plants	47.4%

TABLE NUMBER THREE.

Average for the group, 25 "daily robbers," no municipal plant	65.5%
Glasgow, "the most notable of all" municipal plants	47.4%

This shows that for twenty-four years municipal plants have tried to reduce prices to gas users at the rate per cent. the "daily robbers" have done, and that they have failed. In the language of my opponent I can say:

> "If this were all, some disciple of the impossible might still inspire us to hope that this princely gift of the people's over-generous * * * (daily robbers) * * * of the past might be reached by some yet undiscovered method of taxation; for hope is always permitted to fallen and unhappy mankind (of the variety that advocates municipal ownership). But when the score of years has passed, which, at the least, will be necessary to attain this unattainable result, when Jacob shall have served the promised time in toil and sweat for his Rachel, lo, another period, much like the first, will have opened before us, as the like did to Jacob, for at the end of another ten or of another twenty years, this (difference of achievement between political and industrial monopolies) will have grown.
>
> "This problem cannot be solved by any law except one which will permit the community to retake these franchise values into its own hands, now and here."

The only hope for communities that have adopted municipal ownership, is to sell their municipal plants to a public service corporation that will contract to keep the reduction of the price of gas in economic relation with reductions made by other "daily robbers" throughout the land.

A TRUE SOLUTION OF THE PROBLEM, NOT WANTED.

The superficial character of this discussion cannot be seen more clearly by anyone than by the writer of this paper. A multitude of details, each having an important bearing, when discussed with the view of solving the problem for any given municipality, have not been referred to. The significance of this subject is vastly deeper and more far reaching than is appreciated by many who give it attention. This is emphatically true of that great mass of apathetic people who see in it nothing but a fight between corporations and politicians, in which the politicians are *supposed* to be contending for the rights of the people.

It is not the purpose of this paper to defend corporations, but rather to show the unfair, unreliable and inadequate character of

the evidence offered by the advocates of municipal ownership, and the underlying economic fallacies that are misleading them. If it accomplishes no more than to teach the absurdity of attempting to settle grave questions of public policy as simple matters of expediency; the danger of accepting as authority, statistical statements that have not been verified by disinterested expert auditors; the absolute necessity of knowing how accounts are kept and what items are included in any statement of "costs" or "profit" that are used as guides to public action; that to mislead the people, honestly or corruptly, by the use of unfair, unreliable and inadequate representations is a financial, an economic and a moral crime; if it only slightly assists in accomplishing these ends, its object will be gained.

A solution of the problem—how services to supply wants common to all citizens can be secured and rendered on terms that will fully safeguard the interests of the people, of the Government, and of private investors—*is possible.* It can be solved in a way that will secure the following advantages with absolute certainty:—

(1.) For the user of the services every advantage sought by the advocates of municipal ownership, and more.

(2.) For public service corporations, relief from the legislative evils from which they suffer.

(3.) For investors in public service industries certainty of dividends and stability of value, making their securities in every respect as good as the bonds of the municipality, State or Nation in which the services are rendered.

(4.) For the Government, a stable public policy, founded on correct economic principles which, like the storehouses of wisdom, will increase in beneficence the more freely and thoroughly it is used.

I do not reduce the solution of this problem to a concrete business proposition:

(1.) Because the economic education of the people is not of a character to cause them to demand a settlement of the problem on a correct economic basis for the purpose of securing the advantages that would accrue to them from it. Miseducation prevents them from seeing the advantages they can secure in this way.

(2.) Because "the people" do not, never have, and never will pay for the kind of education of which they are most in need. The gospel of truth has always been, and must always be, forced into the minds of those most in need of it.

(3.) Because it is a subject that pertains to everybody's business. A bitter experience teaches the lesson that work for the general welfare cannot command a support unless it promises someone a special reward beyond his fair share in a prosperity intended to come to all alike.

(4.) Because financial speculators do not want the problem solved and will oppose its final settlement for the reason that in conditions of uncertainty they find the best opportunities to make speculative gains.

(5.) Because political speculators do not want a settled public policy, and oppose measures tending to that end for the reason that, in conditions which cause popular discontent, and rouse the passions, prejudices and suspicions of the people, they find opportunities to make "issues" on which they can command financial and political support, and thus maintain themselves in possession of party power.

(6.) Because financial and political speculators always cooperate for the furtherance of their schemes regardless of party affiliations. They control legislatures and municipal councils. They oppose measures devised purely for the public good, with a concentrated, aggressive, unprincipled, selfish interest, and treat the people with unconcealed contempt. They know "the public" is disorganized, undisciplined and apathetic. They will not permit a correct solution of this problem so long as they can prevent it.

(7.) Because corporation stockholders have not learned that it is better, cheaper and safer to pay for the proper economic education of voters, than it is to submit to the unjust demands of speculators, financial or political.

Until some of these reasons cease to be valid, because of a change for the better in at least some of the conditions named, it will be true that a solution of the problem is not wanted, which will be satisfactory to users of the services, to taxpayers, to those who supply capital and management, and to a government of the people, wisely designed to benefit the people in the most helpful way, and for these reasons, final.

CONCLUSION.

In 1889, I published a book under the title of "The Economic Value of Electric Light and Power," in which I said:

> "Not many years can pass before the progress of events will satisfy cities that have taken the ill-advised action of buying an electric-lighting plant, that, instead of gaining an advantage, they have created an obstruction to the proper development of an electrical service. To secure the full advantage of that service, they will, sooner or later, sell their plants to private companies, who will operate them under contract in connection with a private light and power service."

In a work under the title of "Municipal Ownership—Its Fallacy," published by M. J. Francisco, in 1895, it is stated that the following cities have seen their mistake and sold their municipal electric lighting plants:

"Greenville, S. C.; Carrolton, Ga.; Stockton, Kan.; Lyons, Ia.; Marceline, Mo.; Marietta, Ohio; Michigan City, Ind.; Portland, Oregon; Tipton, Ia.; Titusville, Pa.; Moline, Ill."

Madison, Ind., voted to sell its municipal electric lighting plant October 17, 1895. Brainard, Minn., voted to sell its municipal electric lighting plant Dec. 17, 1895.

It will be observed that these are small towns where there is little opportunity to conceal the true results of municipal ownership and operation. This list will be increased with the record of each passing year.

In 1892 I closed a paper on the "Municipal Ownership of Industries," with the statement that "the day will come when Philadelphia will sell its gas works to a private corporation." The indications that this will be done, are rapidly multiplying. When the users of gas and the taxpayers of that city consider the question and settle it solely with the view of serving their own interests in the best way, they will sell their gas works.

The best opportunity for reaching a practical solution of this problem in a national way, is presented by the necessity for readjusting the relations of the Government to the Pacific Railroads. A correct adjustment of the interests of the people, of investors, and of the government in this case will go far to destroy widespread and dangerous fallacies regarding the government ownership and operation of industries.

As a final suggestion, I ask those who seek to cure the evils of political corruption, which they charge to members of municipal councils and state legislatures, to show when it has occurred in the history of the human race that those prone to cor-

ruption have been made virtuous by being given larger opportunities?

The forces that make for prosperity are vitalized by the savings of labor.

When an industry is monopolized by government ownership all inducement to save, on the part of those charged with its management and operation, is destroyed. The destruction of the natural right of a laborer to own what he saves, predestines municipal ownership to failure. If the people are wise they will resent a proposal to destroy a laborer's opportunity to save as they would the destruction of his freedom.

Measures that are wrong in principle cannot be, and are not, successful in practice.

A REJOINDER.*

By Mr. Grout.

The proposition affirmed in opposition to the argument for municipal ownership of gas is not only that private ownership should continue, but that the franchises should be perpetual and exclusive, that is, perpetual monopolies; that no compensation should be exacted for them; and that no taxes should be levied upon the property of the private corporations. So much of novelty is contained in this position, so much that is contrary to all ordinarily accepted ideas, that the mere statement of the end to which the argument is directed, of the new and strange conditions and circumstances which it is sought to create for the gas supply, easily prepares us to expect that the argument itself depends upon ideas equally as novel and as contrary to ordinary conceptions.

And that expectation will be justified. For the foundation of the argument is the confounding of "governments" with "municipalities," and the false proposition that "governments (meaning municipalities) occupy solely the domain of functions, are supported wholly by taxation, have no industrial capital," and therefore "should not operate an industry." Were this propounded as a theory concerning cities and the proper scope of municipal powers, we might meet it with argument. But it is stated as an existing distinction, and as such it is false historically, legally and in present fact, if by "industry" is intended that which alone we are discussing, a public work which affects the citizens gener-

* Owing to Mr. Foote's extraordinary method of extensive quotation from an article which, when exhibited to him, was stated to be "totally unrevised," and to his still more extraordinary foot-note, the original article has been printed with no substantial change except as shown in the notes which accompany it. Mr. Foote's failure to meet any argument must not, therefore, be ascribed to subsequent additions to the original paper.

ally. "Cities are not limited to providing for the strict necessities of their citizens. Under legislative authority, they may minister to their comfort, health, pleasure or education. They are not limited to policing the city, to paving its streets, to providing it with light, water, sewers, docks and markets. They may also be required by the sovereign power to furnish their citizens with schools, hospitals, dispensaries, parks, libraries and museums, with zoological, botanical and other gardens. They may even thus gratify our ears with music of a summer afternoon, or minister to our comfort by providing us with public baths. Expenditures in all these directions under legislative authority have never been questioned. * * * The true test is that which requires that the work shall be essentially public and for the general good of all the inhabitants of the city. It must not be undertaken merely for gain or for private objects. Gain or loss may incidentally follow, but the purpose must be primarily to satisfy the need or contribute to the convenience of the people of the city at large."*

Rome with its aqueduct and public baths, the cities of the Hanseatic league in their commercial alliance, New York's ownership of ferry and wharf rights from early Dutch days, illustrate historically the application of the same principle now involved in the municipalization of the gas supply. Nor is it to be overlooked that New York now derives a large income from the docks, ferries, markets and water supply, which goes to the support of the city and the relief of taxation. Interesting as it might be to discuss theoretically the scope of municipal powers, we are not dealing with theory. We have the fact of the dual nature, the dual source of income, of a municipal corporation. The power and right to engage in making and supplying gas, and to derive profit thereby, are beyond dispute.

With the correction of this misapprehension on the part of the advocate of private ownership the basis of his argument is gone. Yet as there are but two terms involved in the discussion, *i.e.*, "municipality" and "franchise," it is worth note that the definition given of the latter is as erroneous as the conception of the powers attending the former. He defines a franchise as "an *exclusive* right granted to a corporation to perform a specified

* N. Y. supreme court, in rapid transit case, 1896.

public service." If that were so then we would reach the absurdity involved in having at least eleven "exclusive" gas franchises on Manhattan island, some streets having as many as eleven different mains, put in by as many different companies. Thus led astray, the suggestion that "New York follow Detroit's example and construct a small lighting plant, *and light its own streets*," without resorting to the purchase or condemnation of any private company's franchise *to sell gas to residents*, he deems to "disregard property rights" and to be "an act of confiscation." But since no gas company has an *exclusive* franchise in New York city, it is neither disregard of property rights nor confiscation for the city to enter the field also, just as some newly organized private company may yet do; especially if by so doing, New York, like Detroit, supplies only its own needs. Indeed, since the constitutional amendment of 1874 the legislature of this state is wholly without power to pass any private or local bill "granting to any private corporation, association or individual any exclusive privilege, immunity or franchise whatever." There may, by remote possibility, be one or two corporations in this state which by express terms received exclusive rights prior to 1874, but nothing less than an express grant could make a franchise in this state exclusive. There may also, possibly, be an exclusiveness which results from the nature of the grant; as when a street will not physically permit of more than one company's tracks. Yet even in such a case the legislature may and does permit another company to use a part of such trackage for connections. The distance which may thus be used has varied; and a few years ago it was ineffectually sought to extend it to a number of miles so as to permit a new company to be organized to duplicate the route and, without laying any tracks of its own, to run cars over the entire trackage of a company operating in one of the smaller cities of the state. That "false competition," instigated by the rivalry of private ownership, was not permitted by the legislature.

The plea for home rule in franchise matters is denominated "the plea of a culprit"! New York city is charged with incapacity for self-government! And ineradicable objection to municipal ownership of gas is said to be "written in the records of the criminal courts, giving the details of the trials and convictions of

the representatives of municipal government that New York has sent to Sing-Sing from the days of 'Boss Tweed' to the present time." Disregarding the civic spirit, or the lack of it, here displayed by one who thinks it slander of New York to say that "the record of Glasgow puts this American city to shame," let us remind the author of the jeremiad that Tweed could never have stolen as he did without the aid and comfort of the country legislators who passed the so-called "Tweed charter"; and that the next greatest in the criminal record of New York officials was the Broadway railroad scandal. Clearly, it is true that Albany rule, the giving out of street franchises, and the constant struggle over rates and regulation of the private franchise corporations must answer for more crimes, corruption and scandals in New York city than docks, ferries, markets, bridges, parks and water supply combined.

It is conceded in the argument upon the other side that gas lighting is a natural monopoly, or naturally becomes a monopoly; leaving us a choice between "a political and an industrial monopoly"; the latter to be under a close state supervision, but entirely untaxed. Yet we are told, as a reason why the statistics of municipal gas works are claimed to be unfair, that the municipality "has no expensive conflicts with the municipal councils, nor is it compelled to maintain a lobby, resort to bribery, give interests in stocks or bonds to politicians, or fee able attorneys to watch 'strikes' in the legislature or council, and to resist unjust taxation"; that "it does not have to fight to obtain new legislation or ordinances before it can extend or improve its service"; all of which it is conceded are disabilities of the private corporation, which "tend to increase capitalization, rates of interest, cost of operation, and the price to consumers." But with these concessions, which amount to a concession of almost the whole case of municipal ownership, is brought no prescription which will cure, but rather one which will aggravate these conceded evils; no suggested measures which will avoid, under more stringent and complete regulation, but rather that measure which will increase the corruption and bribery now existing; for, as President Whitney of the West End street railroad of Boston once declared, the more rigid the restrictions imposed upon the private corporation, the more persistently it will force itself into politics and by cunning devices conceal unlawful profits.

But it is in the field of statistics that the argument in favor of the private industrial monopoly, the untaxed and concededly corrupting monopoly of gas supply, errs most; although written by the author of "A Plea for Truth in Statistical Literature." Figures were submitted to him of the private corporation under municipal regulation and taxation in Paris, and of municipal ownership in Philadelphia (where the management was conceded to have been bad in many respects), and in Wheeling, Richmond, Manchester, Birmingham, Edinburgh and Glasgow, as compared with New York under private companies. Louisville was mentioned as one of the cities owning gas works, Dunkirk and Detroit as among those owning an electric plant; but no figures were quoted for these three. Let us examine the reply as to accuracy, as to justice and completeness in choice of examples, and as to fairness in method of computation, and see whether the seeker of truth is revealed.

Dunkirk he singles out for an uninvited attack—uninvited because gas, and not electric lighting, is under present discussion. It is said that while Dunkirk, hailed as the source of subsequent woes to the private corporations in Detroit and elsewhere, is reported as paying but $46 per lamp, some private investigation (the details of which are not stated) showed that the price should have been given as $106. Be it so. But Buffalo, its near neighbor, not more than forty-five miles distant, where prices of material and labor cannot vary greatly, was then paying a private company $146.

The truth is that Dunkirk's actual expenditure was but $46 per lamp, and that allowance for interest upon investment, for taxes and for depreciation would increase that figure to but $56.25. The situation in Dunkirk is this: The city had its water supply plant, with engineers, firemen, and superintendent; it added the electric light plant, in connection with the water works, and the same engineers, firemen and superintendent now operate both. Municipal ownership is properly credited with the saving thus effected.

The following table, which demonstrates the savings of municipal ownership of electric lighting, is quoted from Professor Frank Parsons, whose articles on "The People's Lamps," in the *Arena* for June, September, November and December, 1895, will greatly

interest those who wish to pursue further the examination of the statistics of electric lighting:

Private Ownership.			Municipal Ownership.		
	No. of Lamps.	Cost per Year.		No. of Lamps.	Cost per Year.
Boston	1,850	$139	Braintree	118	$67
New York	2,625	$146 to $182	Dunkirk	75	59.25
Brooklyn	1,528	146	Westfield	60	50
Philadelphia	5,800	160	Easton	122	92
Washington	338	138	Alexandria	92	72
Harrisburg	348	85	Allegheny	620	74
Detroit	1,279	133.80	Bay City	181	66
Louisville	1,074	87.50	Bowling Green	73	66
Indianapolis	750	85	Kendallville	43	36
St. Louis	2,200	75	Little Rock	210	55

In reckoning cost under municipal ownership Professor Parsons has in each case added to actual expenditures a carefully estimated percentage to cover interest on investment, taxes, insurance and depreciation.

Let us now examine Detroit's electric lighting experience, although, like Dunkirk, it may not be quite *apropos* of the subject. Detroit was paying, as Professor Parsons states in his table, $133.80 per lamp to the private electric light companies. Fortunately, indeed, no foolish citizen attempted to upset the municipal lighting law in the courts upon any ground of false information furnished to the legislature, for three very good reasons: There was no false information; if there had been, any tyro in the law knows that it would afford no sufficient ground for legal attack; and if such attack could have succeeded, the city would have been the loser, as we shall see, and the private companies the gainers.

No measure could have been more carefully considered than was this in Detroit. In January, 1890, Mayor Pingree, in his message, said: "Lighting the streets is as much a public matter as street paving and cleaning, sewer building, maintaining and improving the parks and boulevards, supplying water or providing protection against fire. I think the time has come when the city should assume control of public lighting and own and operate its own plant for that purpose, thereby escaping the

caprices or combinations of private corporations." In May, 1891, he again urged municipal ownership. In 1892, and again in 1893, he submitted figures showing the cheaper cost of municipal ownership; and in the latter year he obtained an enabling act from the legislature. Under that law the people of Detroit voted in favor of establishing the city plant. The city was prohibited from engaging in private or commercial lighting; it was limited to lighting its own streets. Yet, including maintenance, repairs, operating expenses, insurance and interest on the investment (that is, including everything but taxes, and it would be difficult to see where Detroit has lost anything in the way of taxes, since the plants of the private corporations are still there for commercial and private lighting), Detroit's first report shows a cost of $84.70 per lamp, as against the $133.80, which she formerly paid.

It is denied that Louisville is to be ranked as owning gas works because it is found that there is a Louisville gas company. But, apparently, this denial is made in ignorance of the fact that the city of Louisville owns more than one-quarter of the capital stock of that company (9,250 shares out of 36,000); that no other person or corporation than the city may hold more than 1,000 shares; and that the city council elects four of the nine directors of the company. The gas company operates an electric lighting plant, and the streets are largely lighted by electricity. Louisville prides itself on being "more completely lighted than any city of similar size in the country," and upon having a "contract for electric lighting very much less than that of any other city, with the possible exception of one." Professor Parsons, in his table above quoted, might well have put Louisville into the municipal ownership column, for in both gas and electric lighting Louisville is as much entitled to be ranked thus as is Philadelphia in regard to gas lighting.

The general charge is made that the statistics of municipal ownership are unfair, unreliable and inadequate. But the first requirement of truth in statistics is that a fair average of examples shall be examined. This we sought to do but our opponent has not. Had he done so, he would have found neither unfairness, unreliability nor inadequacy. We have reviewed his departure from the subject of gas and his excursion into the field of electric lighting in the cases of Dunkirk and Detroit. He was proffered the experience in gas lighting of Philadel-

phia (a partial and unfavorable example) and of Wheeling, Richmond, Manchester, Birmingham, Edinburgh and Glasgow. His reply is to attack only Philadelphia, and to ignore Wheeling, Richmond, Manchester, Birmingham, Edinburgh and Glasgow; except to argue that the "relative reduction in price," the "percentage of reduction" in Glasgow is less than that of New York.

As if it betokened anything to say that New York's reduction is 64% and Glasgow's but 47%; when New York started at $3.50 a thousand and by force of bitterly contested legislation has come down to $1.25, while Glasgow during the same time reduced from $1.14 to 54 cents per thousand. Percentage in such a case serves only to cloud the truth, not to reveal it. It does not show actual results. It is not the method of truthful statistics. It is not only an unfair, unreliable and inadequate, but it is also a false and a misleading method.

It is not possible, within present limits, to re-produce in detail the abstracts of accounts of the British cities. The results were briefly stated in the original article. No plaint of inefficient public bookkeeping, of unfair, inadequate or unreliable statistics, could come from the mouth of anyone who has ever examined the reports of those cities. The other side does wisely to ignore them. Everything is included in them, except the corruption and bribery expenses so vividly described by our opponent, and they do not exist. Interest on investment, taxes, insurance, depreciation, repairs and betterments, all operating expenses (including good wages and salaries), a sinking fund and a reserve fund, all are charged before net profits are reckoned. Thus Birmingham, for instance, selling gas at about 55 cents per thousand, before reaching its net profit last year of $125,000, charged all ordinary operating expenses, besides over $125,000 for rates and taxes, over $570,000 for repairs, maintenance and renewal of plant, over $3,000 for bad debts, over $2,500 for contribution to workmen's sick fund, and about 2½% on the total value of plant and buildings for depreciation, about $500,000 for interest and for the sinking fund; and it carries a reserve fund, accumulated out of the income of prior years, of $500,000. If it were slander of New York to say that the record of Glasgow puts the American city to shame, let us now retract and modify: The records of Birming-

ham, of Manchester, of Edinburgh and of Glasgow put us to shame.

There remain the attacks upon the figures as to Paris and Philadelphia. As to the former, the quarrel must be with Dr. Shaw, from whose book, published in 1895, the quotation was made. Dr. Shaw has an established reputation for accuracy; the *Century* magazine cannot readily be taken as a suppressor of truth. If Dr. Shaw's critic brought his corrections to the attention of Dr. Shaw and of the *Century* some years ago, then Dr. Shaw probably had sufficient reason for maintaining his position when the magazine articles were brought together, re-written and enlarged for the books. Let us venture a few criticisms, however, upon these alleged statistics of Paris.

This critic, even if his figures rather than Dr. Shaw's are right, distorts them; for he includes *in dividends and interest* $2,250,510 annual contribution to sinking fund for redemption of capital and bonds, so set aside because the Paris franchise is limited in time and not perpetual; although in another place he declares that the redemption funds for capital and bonds are provided for *as part of the expense of operation.* Deducting this would reduce the dividends and interest of the Paris company to a sum less than New York and Brooklyn companies pay. Very possibly a critic who makes the mistake of covering the trifling sum of $2,250,000 into both profits and operating expenses may have fallen into a few other errors.

But we should not, in the dispute over figures, lose sight of other facts. Let us assume, for the moment, that the statistics as to Paris are not as given by Dr. Shaw, but as stated by his critic. What is the effect upon the argument as to municipal ownership? Paris is not the owner and operator of the gas works. There is there a private monopoly, regulated and taxed. It was brought into the original article only as an illustration of municipal regulation. Let it stand as such, assuming the corrections. It will still show two things: one, that New York can never hope to get as complete a system of regulated and taxed private monopoly; the other, that the system in Paris does not yield the benefits of the system of municipal operation in Birmingham.

The exactions of the city ($3,678,114) will not suffice to explain the alleged price of gas in Paris; for if it be true, as stated, that $3,678,114 "amounts to nearly one-third of the price charged

for gas supplied to private consumers," then the alleged dividends and interest of the company, $6,233,174, plus the redemption or sinking fund items of $2,250,510 ($1,726,510 and $524,000), amounting in all to $8,483,684, or more than twice the city's receipts, would account for the other two-thirds of the price of gas, reaching the result at least that gas costs little or nothing to manufacture, beyond interest and profits on capital.

Nor is the alleged high price fairly to be attributed to the city's exactions, if, as also alleged, the company, in addition to paying such exactions, plus interest upon its alleged bonded indebtedness, plus more than one-thirtieth annually of the par of its share and bonded capital, also pays itself annually *nearly 27 % dividends* ($4,560,000 on $16,800,000), and that not upon the unredeemed value of its share capital, but upon the par value without allowance for what has been already redeemed. *The excessive profit to the company is the cause of the high price.* Six per cent. dividends upon the share capital of $16,800,000 would amount to $1,008,000, instead of the $4,560,000 dividends which the company is said to get. There is an excess, then, over ordinary and reasonable profits, of $3,552,000, *i. e.*, of nearly 21 %. If the city's dues, stated exactly at $3,678,114, amount to nearly one-third of the consumer's price, *i. e.*, ⅓ of $1.69, or 56⅓ cents, then the company's excessive dividend must have a proportionate relation to that price. Here we have a simple sum in proportion, such as we used to do as boys in school: $3,678,114 is to $3,552,000, as 56⅓ cents is to 54⅔ cents. *That is, reducing the profits of the share capital to the reasonable rate of 6 % would reduce the price of gas from $1.69 to $1.14⅔, (the price to the city remaining at 84$\frac{9}{10}$ cents), and the city would still get $3,678,114 annually for its franchise.* Capitalize that sum at 5 % and the Paris gas franchise, if perpetual, reveals a value of $73,562,280. We claimed the New York and Brooklyn franchise to be worth but half as much, although they receive a higher price for their product.

Or, better still, if the city of Paris owned the works and sought to get only interest upon its investment, running the works on the present scale, then 56⅓ cents plus 54⅔ cents, or $1.10 + could be taken from the present price of $1.69, and gas could be supplied at 59 cents per thousand, or nearly as low as in Birmingham, and fair interest still be paid upon investment, plus the present allowances for depreciation.

So much for Paris. It affords criticism upon New York's conditions, and aid for the argument for municipal ownership, even if we adopt the figures offered in substitution for Dr. Shaw's.

As for Philadelphia, the true statistican would probably not quote, in rivalry to official figures, the figures of John W. Baker, a member of a syndicate which has sought to purchase the city gas works, and who was therefore intent upon depreciating the profit of those works to the city. He would not have confined his examination of the results of municipal ownership to the one concededly least favorable example. He would have sought a fair average of results, examining the figures of the British cities, of Wheeling and Richmond, as well as those of Philadelphia. He would not, recognizing the important bearing of the price charged the people, have mentioned that during *seven* years the Philadelphia price was $1.50 while the price in New York was $1.25, without giving the prices in thirty-nine other years, during which, from 1845 to 1886, excepting only two years, the Philadelphia price was 25 cents, 50 cents, or even $2, $3, or $4 cheaper than New York prices.* Philadelphia may be no shining light; it suffered for years because the works were in the hands of irremovable and irresponsible trustees; it suffers now because, as the Philadelphia *Ledger* says, the city councils, having full authority to make the improvements which the works need in order to produce more economically, *will not act because of the influence of corporations*. There lies the trouble in Philadelphia—corporation influence in politics and upon officials, the influence of the gas companies which, for their own profit, seek to destroy, and if they cannot destroy, then to hamper and to impede and to depreciate the city operation of the gas works. But, with it all, the cheapness of gas to consumers, as compared with prices here, has kept municipal ownership in Philadelphia from failure; and has left it open to advocates of municipal ownership to say that under the most unfavorable of conditions, and in the least representative of examples, municipal ownership has surpassed in advantages to the people the results of private monopoly in New York.

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* See Prof. Bemis' "Municipal Ownership of Gas in U. S.," American Economic Association, Baltimore, which not only treats Philadelphia fully, but all other American municipal plants, giving statistics which are not open to any complaint of incompleteness.

THE PROGRESS OF MUNICIPAL REFORM.*

By Clinton Rogers Woodruff, Secretary National Municipal League.

It is somewhat difficult to estimate the progress made in any one year by the movement for better municipal government. Figures are interesting, and up to a certain point instructive. I could marshal a great array of figures as to the number of organizations and members, the amount of money raised, the pages of publications issued and an account of the meetings held, and yet come short of telling the whole story of the year's advance. I know of no adequate method except the inductive—a narration of all the activities of all the associations working for reform, and yet this would require an amount of time that I do not feel is at my disposal. The most that can be done in this connection is to recount the principal achievements of the more active organizations, and from this recital draw certain conclusions touching the growth of the movement. If the delegates and members of the League could but for a month read its correspondence they would realize as in no other way how deep and widespread is the interest in our work, and how constantly it is growing. From all classes and from all sections; from the student and from the business man; from the professional man and from the laborer, inquiries are daily received about some one or another phase of the problem, and the newspapers, weeklies and magazines all seem to vie with each other in giving information bearing on the numerous points at issue. It is a moderate statement to say that no subject of permanent interest and lasting importance is receiving at the present time more careful or more general consideration at the hands of the public. The interest seems to be abiding. What the result of it all will be it is somewhat difficult to say. Whether it will result in a new and broader conception

*Address delivered at the Louisville Conference for Good City Government, May 5, 1897.

of the duties of citizenship, or only in a few unimportant reforms, of course no one now can tell. Personally, I profoundly believe it will usher in a new era for our American cities wherein the good citizen will be he who takes a deep and continuous interest in municipal affairs, and who will not shirk a single political duty upon any pretense. These "good times" may not come this year or next, but they are on their way, and will be here perhaps before some of the most sanguine of us expect.

Taking up the recital of important achievements from which we are to determine the extent of the general advance we must commence with Boston, which may not inaptly be described as the home of political experiments. Here we find the Municipal League continuing its efforts to secure needed changes in the laws relating to that city. One by one important amendments have been suggested, pressed and finally adopted. The term of the mayor has been lengthened and single-headed bureaus substituted for commissions, and now a league bill is upon passage establishing a single-chambered legislature in place of the biennial one, and another creating a mayor's council, or cabinet, to consist of members selected from leading trade and business bodies, to serve in a purely advisory capacity, and to perpetuate as a part of the city's government the present extra-legal, but most useful council appointed by Mayor Quincy at the beginning of his term. The league's activity has been mainly along legislative lines, although it has exerted in some directions a most salutary influence politically.

As an outgrowth of the recent street car agitation, a strong citizens' committee has been appointed to agitate for the municipal ownership of street railways. This committee has already enlisted many of the most prominent citizens of Boston, and promises to bring the whole question before the general public in such a way that they will before long have to decide definitely whether or not they purpose to have the city reap a portion of the benefits of municipal monopolies or whether they intend that the present plan of allowing private corporations to reap them shall continue. By printed page and public meeting the committee has succeeded in making the whole question one of immediate and pressing interest. Every such discussion is bound to result in a closer study of municipal problems, and has an educational influence of great value. The Twentieth Century Club,

organized to promote a finer public spirit and a better social condition has continued its work along its chosen lines. It is most difficult to appreciate fully and exactly the value of such activities as have been carried on under its auspices, but there can be no doubt of the great usefulness of such bodies, and from them come many of the most energetic and successful workers. They perform a function of untold value.

The Municipal League of Providence, Rhode Island, although organized since our last meeting, has to its credit what many an older organization might be justly proud of, the re-election of a competent Democratic mayor in a Republican city in a presidential year by 10,000 majority—a striking endorsement of one of the fundamental principles of municipal reform, that municipal affairs must be considered separate and apart from state and national politics. The league's victory has had a salutary effect, and associations are springing up in other sections of the state, all based on the same principle and designed to carry on a similar work.

From the smaller cities of New England come equally encouraging reports. In Biddeford, Maine, the Citizens' Municipal Association a year ago nominated, supported and elected a non-partisan ticket, and this year re-elected the officials who had faithfully carried out their promises to give the city an economical and businesslike administration. Six out of seven aldermen and 18 out of 21 councilmen supported by the association were elected. The Library Hall Association, of Cambridge, Massachusetts, has continued with its usual success to discriminate between candidates, and to recommend those whose records and character indicate their fitness to serve the public faithfully. By means of this process for a number of years, carried on with judgment and discretion, the city of Cambridge has now a city government of unusual ability, and one which has the somewhat unusual merit of generally representing the wishes of the citizens. The Municipal League of Somerville elected a mayor, two aldermen and six councilmen, and greatly improved the political atmosphere of the city.

When we come to consider the state of municipal affairs in New York City, or to be more accurate, in Greater New York, we find them most perplexing. The fact of consolidation is a great event of itself, and the draft of a charter for the new city is

an equally great one, and these two practically overshadow all others. The welding together of several independent communities of differing traditions and antecedents into a harmonious whole will prove a difficult task. The political ingenuity of the Anglo-Saxon will find a way out, but I rather expect it will tax it to the utmost. Whether the new charter will hinder or promote effective consolidation we shall have to wait to see. About one thing there can be no doubt, and that is that while in some features it represents a distinct advance in charter making, in giving to the mayor fuller responsibility, with adequate power, on the other hand it represents an adherence to the old idea that municipal legislatures must be modeled after those of our State and federal governments, as if their functions were analogous. Whereas, if our modern experience has taught us anything, it is that many of the evils of municipal government are due to the adherence to the idea that municipal government is essentially the same as the federal government, and should be conducted along similar lines, and that its personnel should be selected in the same way and upon the same platform. It is most unfortunate from the point of view of charter development that more time could not be given to the consideration of its provisions, so that it should represent the latest and best thought on the subject of municipal government, and also represent a concrete and harmonious whole, instead of the crude enactment that necessitated within 48 hours after its passage the introduction of upwards of 30 amendatory bills to correct defects, omissions and mistakes.

The formation of the Citizens' Union can only be regarded as auspicious, and as a rational result of the painstaking work of the City and Good Government clubs and the Citizens' Vigilance League. It stands squarely and fairly for a consideration of municipal affairs from a municipal viewpoint, irrespective of national or state politics. It is the intention of the Union to have a personal canvass of every voter in Greater New York to ascertain his attitude on this and other propositions connected with the efficient government of the city, so that no one can say that he has not had the opportunity to co-operate with those favoring good government— a step of undoubted educational and political value.

These questions of the future in New York overshadow the solid work for reform that has been accomplished under the present administration. Although we cannot but regret that its distinguished mayor construed his non-partisan election and victory to be a multi-partisan one, still many substantial reforms are to be credited to it. The improvement in the police force and in the minor judiciary, in the cleanliness of the streets, in the school, fire and park boards, not to mention more, are all worthy of commendation, and any one of which would ordinarily be considered a matter for profound congratulation.

The Good Government clubs of New York City have undertaken certain special work which has thus far been most successfully carried on. For instance, under the act of 1895, providing for the expropriation of tenement houses for sanitary purposes, a number of the most objectionable and crowded tenements in the down town district have been condemned; the properties vacated, and the orders of the Board of Health enforced, despite the opposition of the landlords. As a consequence a number of houses dangerous to the health of the community have been demolished. The clubs have also been devoting considerable time and attention to improving the sanitary condition of bake-shops and to the enforcement of the law relating to the introduction of safety appliances in tenement and other buildings occupied by large numbers of people. More than 10,000 orders for lighting up the alley-ways and dark tenement houses have been issued by the Health Bureau at the instance of the clubs, and other similar work has been undertaken to the manifest advantage of the poor, who must of necessity live in these districts.

Considerable attention has also been paid to the administration of justice in the lower courts and to the enforcement of the Compulsory Education law. The Board of Education has been compelled to provide a truant school instead of sending the truants to the institutions to which child criminals are committed.

The City Improvement Society and the Woman's Health Protective Association have been specially active in investigating complaints of the violation of laws and with efforts to secure the enforcement of existing ordinances. Their work has been most successfully carried on, and there has been an appreciable improvement in certain lines of municipal work as a consequence of

their activity. Similar organizations in Brooklyn have been equally successful.

The Citizens' Union of the latter city will in all likelihood merge in the Citizens' Union of Greater New York. It is set as a bulwark for non-partisan government and in that it has paved the way for the organization of the same name and on the same lines in the new metropolis, it has done a good work, even if it had nothing else to its credit.

The Good Government clubs of Buffalo have been devoting their energies particularly to improving the caucus system in vogue in that city, and to increasing independent voting. As a result, they report there has been an increase in the latter of 10,000 voters and the clubs now hold the balance of power. Thus far no candidate endorsed by the Good Government clubs has been defeated, and no candidate condemned has been elected. Special committees of the council of Good Government clubs have been conducting investigations of several boards of the city government and as a consequence, indictments have been found against eight supervisors and the keeper of the almshouse on the charge of fraudulent accounts. A radical change for the better in the methods of conducting the finances of the board of supervisors has already taken place. The Good Government clubs subscribed $5,000 to prosecute the work which has been thus far so successfully carried on.

In Rochester, the good work reported a year ago has been continued and the Good Government club has brought the machine to its senses, so that the latter is now trying its best to furnish better government for the city. The club has been active in securing the passage of a new charter for the city. Its enactment by the recently adjourned legislature is considered a great gain for good government. Outside of the cities mentioned there has been no special development except in the way of legislation for second-class cities, a bill providing a new form of government for these having been passed by the legislature. This latter has had the approval of many of those who are interested in the welfare of the cities affected.

In Pennsylvania, thanks to the positive and unequivocal declarations of the Republican state platform, for two years past, the reform movement has received an undoubted impetus. There is a tendency now, however, that concrete measures have been

presented to the legislature on the part of some members to allow the party's promises to go by default, but wiser counsels are prevailing, and while the reformers are not likely to secure all they have asked for, still the prospects are that a very substantial advance may be made. The Municipal League of Philadelphia has prepared and submitted a number of amendments to the present very excellent charter. They are designed to extend the principles of that instrument to certain departments not now covered by it. For instance, one bill provides for the election of select councilmen on a ticket-at-large, and the reduction of the number of its members and those of common councils. Another provides for the enactment of an adequate civil service law, a third makes members of councils ineligible for municipal, county or state offices, a fourth forbids the political assessment of officeholders and the fifth provides for the regulation of municipal franchises. All of these amendments have received the hearty approval of reformers throughout the state and a general desire has been expressed to have them apply uniformly to all cities of the commonwealth. The Municipal League of Pittsburg is working to secure a new charter for that city, based on the Bullitt Bill, and including the Municipal League amendments. As the legislature is still in session, it is impossible at the present time to state which of the reform bills will be enacted into law, but the sentiment seems to be general that there will be some reforms, if not all that have been asked for, adopted.

In Wilmington, Del., the charter commission has reported to the legislature an excellent charter modelled on the lines of concentrated responsibility and a clear and distinct definition of the powers of the several branches of the government. This charter, like that for Pittsburg, is now pending in the legislature and only the politicians are opposed to it because it means a curtailment of their privileges and the necessity of a readjustment to new conditions. Outside of the politicians, however, there seems to be practically no opposition to the measure.

In Baltimore, the event of most importance during the year was the victory of Mayor Hooper over councils. It will be recalled that when Mayor Hooper was installed in office many of those who had co-operated in securing his election, claimed that his victory was a partisan one. He differed from these interested advisors and claimed that his election was a victory for the peo-

ple, and that his office should be administered accordingly. When he attempted to follow out this idea and refused to accede to the demands of the politicians they retaliated by having the ordinance passed through councils taking away from him the right to make certain appointments. The councils in accordance with this proceeded to elect certain officials that had heretofore been appointed by the mayor. The latter asserted his rights and appealed to the courts for a vindication of his course. It was a matter for congratulation and a triumph for civil service reform when the court decided that councils had no right to take from the mayor the power of appointment in the case before them, and practically confirmed his right to make appointments in accordance with his own ideas of good government. This was a defeat for the politicians from which they will not recover for many a day.

The Democratic League for Good Government is a unique organization of Richmond, Va. Its membership is confined to white Democrats, but otherwise its fundamental principles are in accord with similar organizations elsewhere. It has been organized scarcely a year but every one of its candidates, with a single exception, was elected, and, thanks to its well-directed activities, the councils have created a board of retrenchment and reform, and a saving of $150,000 per annum in the way of expenses accomplished by the introduction of business methods.

Interest in municipal affairs in the cities of Ohio continues unabated, and independence on the part of voters has been the leading characteristic in the recent elections. In Toledo the reformers elected their candidate for mayor and police prosecutor, which gives them, with the member elected last year, the majority of the board of police commissioners. This will of itself insure a prompt and efficient enforcement of the laws and ordinances. The gains in other directions have been equally great. The result in Cincinnati, where the "machine" candidate was decisively defeated, although having the support of expectant federal and state officeholders, is cause for congratulation.

In the western states the most interesting event has been the recent election in Chicago. This has been variously regarded by the friends of good government, some maintaining that it was a decisive defeat for the good government forces. Others maintain that there were certain substantial gains made. At first

blush, it did seem that the victory of Mayor Harrison, who had generally been regarded as unfriendly to civil service reform, was a decided set-back for the cause, but his statements since his election have been so satisfactory that the Civic Federation of Chicago has adopted resolutions endorsing his position. The Municipal Voters' League took a prominent part in the campaign. Of the thirty-four aldermen retiring the past spring, the League condemned on their record, twenty-eight. Of these only ten succeeded in securing a re-nomination, and two ran upon independent tickets. Of the twelve named who ran as candidates, only two were elected, and one other succeeded in securing a certificate of election, but his seat was contested. Of the new members elected, twenty stand pledged in writing to support the principles of the Municipal Voters' League. The officers of the League claim that the present council is the best that the city has had in years. It is admitted that the council is more to be relied upon than the legislature. As a consequence the politicians and interested corporations have transferred their fight from councils to the legislature, in the fear that an incorruptible council will not recommend extension of the franchises which will expire within the next three or four years. The large vote cast for the Independent Republican candidate is also regarded as indicative of a large independent sentiment in the community.

The Civic Federation during the past year undertook an extensive investigation of the pay rolls of the city and developed a large amount of municipal corruption, and evidence was secured and an attorney employed, who under the direction of the Civil Service Commission, succeeded in sending a number of men to the penitentiary and broke up a deliberate and organized system of pay roll padding. A large number of bucket-shop keepers have been indicted and a number of indictments have also been secured for violations of the primary election. In street cleaning work, the Federation has succeeded in reducing the contract price from $18.50 per mile to $8.00. Many other equally important reforms have been accomplished. On the whole the year has been a prosperous one for reform in Chicago, and the active workers there cannot but feel encouraged in the advances made.

The Municipal League of Milwaukee, as in former years, has a long and satisfactory list of accomplished reforms to its credit. Last year it had the pleasure of reporting the passage of a civil

service law; this year it is a corrupt practices act. This has occupied its main energies; but not to the exclusion of attention to other important work. For instance, it has exposed and corrected the extravagance of the city government, and the fact that it had exceeded its legal tax limit. It exposed in time to prevent its consummation a contemplated steal of $10,000 in connection with the purchase of a school site. It drafted and materially assisted in the passage of a bill reorganizing the school board. It has also before the legislature several other important bills introducing needed reforms which may become laws at this session.

The Municipal Reform League of Duluth, Minn., elected five out of the eight aldermen. The Civic Federation of Denver was successful in securing the election of the taxpayers' ticket, for which it was largely responsible, by a large majority. The women, who contributed largely to this by their votes and influence, not unfairly claim a large share of credit for this most satisfactory outcome and maintain that it demonstrates the advisability of enfranchising women. Of the renewed energy of the Louisville Good Government Club in pressing for the indictment and conviction of derelict public officials I need not more than refer to at this time, and in this place.

I have not attempted in this hasty and incomplete review to indicate all that has been accomplished since our last meeting. I have only sought to point out here and there what has been done as an example of what other communities have achieved. Nor have I undertaken even to describe the numerous efforts that have been made in every direction to study the problem, to inform and educate citizens, to arouse interest and to organize reform sentiment. In many instances the work done along these lines is quite as valuable and quite as important as the victories chronicled. There must be a vast deal of preparatory work before we can begin to hope for permanently satisfactory results, and the increasing number of organizations devoting their time and means and energies to this preliminary and fundamental work is to my mind the most encouraging event in the whole course of the movement in which we are interested. Not that I underestimate the value of victories referred to, but our campaign is essentially one of education, and must be for some time to come, and the realization of this among the great mass of municipal reformers furnishes substantial ground for an optimistic view

of the whole situation. If they were striving only for immediate success, without reference to the future, it would present but a pitiable picture, but as they are working heartily for the present, and quite as heartily for the future, we need have no fear of the ultimate outcome of the whole agitation.

The development of interest and progress along certain lines of municipal activity is specially interesting and important. I have reference particularly to charter reform, municipal ownership of semi-public monopolies and civil service reform.

Charter reform has been an absorbing question in many communities the past year, due undoubtedly to the discontent that has grown up as a consequence of a broader knowledge of municipal affairs on the part of citizens. The first step usually taken by those who have become interested in the subject is to suggest a change in the laws, hence charter revision has come to occupy an important place in reform movements. The desire for this change, which has been general throughout the country, further indicates a growing disposition to break away from the old idea of divided responsibility and adopt the modern idea of undivided and concentrated responsibility and adequate power. We are gradually getting away from the fear of one-man power, which was so prevalent a hundred years ago, and the effects of which we see in most of our present day state and municipal constitutions and charters. A careful study will disclose the fact that governors and mayors have had but little actual power, their principal function being to represent the dignity and standing of the state and city. This state of affairs is, however, partly due to another cause, namely, that we have followed English custom and precedent too closely without realizing that we had our own problems which we must solve in our own way, with due regard, of course, to the experience of our English sisters. I have in mind the charge of a large and prosperous commercial city of upwards of 300,000, the mayor of which has the appointment of two officials, a clerk and a messenger in his own office, and no other, and outside of a veto power over legislation performs no other functions except to sign a certain class of vouchers. It is hardly possible to reduce the duties of an official to a narrower limit. The power of appointment under this charter is principally in the hands of certain directors of departments elected by councils. The terms of directors expire at a different period from those of

the councilmen, and by those satisfactory arrangements, which politicians know so well how to make, the two parties to the agreement play into each other's hands and work each to perpetuate the tenure of office of the other.

In every instance of charter revision which has come to my notice during the past few years the power and responsibility of the mayor has been exalted, and the functions of the several departments of local government sharply differentiated. In some cases the reforms have been introduced one by one, as in the cases of Boston and Milwaukee. In the majority, however, a single bill has been prepared embracing all the desired changes. We have already mentioned the efforts of Boston, New York, Philadelphia, Pittsburgh and Wilmington. In New Orleans an excellent charter, embracing the most modern ideas on city government, was passed by the Louisiana legislature, and is now in successful operation. In St. Paul, Minneapolis, Duluth, Minn., Wheeling, W. Va., Denver, Los Angeles, Cal., Sacramento, Cal., Tacoma, Wash., St. Louis, Mo., and Galveston, Tex., the question has been debated in one form or another. In some the efforts have succeeded; in others they have failed, and in others they are pending. Judging from the reports that have been made, those who have undertaken the matter in the various communities do not intend to yield any of their demand for improved forms and methods of government, and purpose keeping up the fight until all of their demands are granted.

The awakening sentiment in favor of the municipal ownership and control of semi-public monopolies, like street railways, gas and electric light plants and waterworks, is a further indication of the deepening and broadening interest in municipal affairs. There are organizations in Boston, Brooklyn, Buffalo and Alameda, Cal., that are devoting their attention exclusively to this phase of the problem. Other bodies, of which the City Club of New York, the Municipal League of Philadelphia, the Commercial Club of Indianapolis, and the Civic Federation of Chicago are types, are giving it careful and studious attention. There cannot any longer be a doubt as to the trend of public opinion on this subject. The number of advocates of municipal ownership (which does not necessarily mean municipal operation) is constantly increasing, and the number of advocates of private ownership is just as surely diminishing. I do not make this as-

sertion in the way of argument, but simply and solely as an observed fact.

Until two years or so ago the only cities in which civil service rules were in force were those of New York and Massachusetts, unless we take into consideration the system in Philadelphia. In New York, under the act of 1883, the mayors of cities of over 50,000 inhabitants were permitted to prescribe rules. In 1884 the act was made mandatory, and extended to all cities without regard to population. The mayors of New York, Brooklyn and Buffalo, however, had already prescribed rules under the permissive act. The system is now in operation in each of the thirty-five cities of New York State, and each city has its own civil service commission, appointed by the mayor, though the rules and classification it adopts are subject to the approval of the state board.

In Massachusetts the rules are applied to every city by the original act of 1884. The plan is radically different from that in New York, however, in that the state board has direct control of the examinations in each city. There are no local commissions.

The Illinois act of 1894 provided for the establishment of rules in any city in which the proposition might be approved by popular vote. The system was adopted in Chicago at the spring election of 1895 by a very large majority of votes. It has since been adopted in Evanston by a correspondingly large majority. In Wisconsin an act was passed in 1895 providing for rules in cities of the first class. Milwaukee is the only city affected, and the rules there have been in full effect since July 5, 1895.

In Seattle and Tacoma, Washington, the system was adopted by a popular vote at the spring elections of 1896. In Seattle the incumbents of all city offices were subjected to an examination to qualify them for retention, and quite a number of incompetents were dismissed in consequence. In Tacoma, shortly after the civil service commission was organized and the first examination held, the new charter in which the rules were embodied was annulled by the lower state courts on the ground that the election at which it had been adopted had not been regularly called. A month or so ago the supreme court reversed this decision, and the application of the rules has been resumed. In New Orleans the system was incorporated in the new charter passed by the legis-

lature of 1896, and although hindered by the hostility of the common council, it is now in fairly smooth operation.

This comprises the list of cities in which rules are now in operation. The list of municipalities in which movements for civil service reform have been commenced during the past year is a large one.

A civil service bill has been introduced in the legislature of Connecticut applying to the state service and to every city. Civil service provisions have also been inserted in the proposed new charter for New Haven. An act that has been in force for a year in that city provides for rules in the case of the police and fire departments, but the examinations are not competitive and amount to little.

In New Jersey the proposed bill applying to all cities of the state was drafted by a committee of the Newark common council at a recent meeting. Owing to the opposition of a delegation of veterans representing various Grand Army posts, a motion to recommend the passage of this bill to the legislature was defeated by a narrow vote. The subject will undoubtedly come up again another year. In Pennsylvania a bill has passed the Senate, and is now pending in the House, providing for the application of civil service rules to all officials of the State and of all the cities. It has been formally endorsed by the Republican Convention and the Civil Service Association.

In Maryland the last legislature passed a bill for the submission of a proposed constitutional amendment to the people at the election of November, 1897. This amendment provides for rules in every city of the state. It has recently been discovered, however, that the language was tampered with during the last days of the session, and it may be decided by the local reformers to abandon the attempt to pass it, and to depend on the next legislature for a general bill.

In Wheeling, W. Va., a proposed new charter has been drawn and submitted to the common council. It provides for a complete system of civil service rules. The progress of this movement has been retarded somewhat, however, by the hostility of the council. In Michigan a bill is now pending providing for rules for state and city offices, and in Wisconsin a bill is also pending extending the Milwaukee system to the other cities of the state. In Minnesota there is a bill pending, framed on the

lines of the Illinois bill, applying to those cities that may adopt it by a popular vote. In Iowa a bill has been introduced providing for a system of rules for Des Moines, prepared by the Commercial Exchange.

In St. Louis charter amendments providing for a very complete system of rules will be submitted to popular vote at a special election to be called in June. These amendments have been prepared by the charter revision commission of the city after numerous public hearings, and have been framed evidently with the utmost care. In Galveston, Texas, there is a charter commission at work, a sub-committee of which is charged with the preparation of civil service sections.

In Colorado a state civil service bill is pending, having the local option provision, and framed somewhat on the plan of that in Minnesota. A few days ago, however, those sections of the proposed new charter for the city of Denver containing the provisions for civil service rules were stricken from the bill. In California a proposed new charter for San Francisco embodying the civil service system was defeated by a narrow majority, though the issue on which it was lost was not that of civil service reform. A proposed new charter for Los Angeles, also containing a civil service provision, was defeated in a popular election, a majority of the votes being cast for it, but not the necessary two-thirds. A state civil service bill, applying to every city, was defeated in the Senate a week ago by a majority of three votes.

While it is probable that not a few of these local movements will fail of success, it is plain that the promoters of each are very much in earnest, and that success will come some other year if not this. Every indication points to a very general movement among the larger cities for the adoption of the reform through charter amendment during the coming year.

In every direction the outlook is bright and promising, not of the immediate fulfillment of all the hopes and desires of those who are most deeply interested perhaps; but of substantial progress and steady growth. The sentiment for better government is gaining day by day. It is not a movement for a particular form of local government nor of specific panaceas for municipal evils; but rather one to bring the citizens, those who are primarily responsible, to a fuller appreciation and a more general discharge of the duties of citizenship—in short, a movement for

citizenship reform. The indifference and apathy of the average voter has been a matter of general comment. To overcome this and to replace it with that interest and that action without which no permanent reform can be accomplished; the realization that good government depends for its very existence upon good men, is the fundamental basis of municipal reform. Charter revision, civil service rules and regulations, fair elections and an honest count and return are all important; but they depend for their success upon sound public opinion and that depends upon good citizenship. Good laws are important; good citizenship is essential.

AMERICAN POLITICAL IDEAS AND INSTITUTIONS IN THEIR RELATION TO THE PROBLEM OF CITY GOVERNMENT.*

By Dr. Leo S. Rowe.

The historian of American political institutions will probably designate the last quarter of the nineteenth century as the period of municipal experimentation. The history of municipal institutions during this period negatives many of the accepted views of Anglo-Saxon conservatism. Changes of a radical character have been accepted with an ease and readiness departing widely from the traditions of our political life. To explain this seeming paradox with the statement that the American people are more open to change in their municipal than in their state and national institutional life, is to beg the question rather than answer it. An analysis of the conditions of city life will show the presence of causes, deeply rooted in our political system, which fully explain the prevailing uncertainty as to the most effective organization of the municipality, as well as the great divergence of opinion on some of the fundamental questions of municipal policy. We have reached a point at which further progress has become dependent upon the clear recognition of these causes. To determine their nature and, if possible, suggest the line of progressive evolution is the purpose of this paper.

The study of the institutions of ancient and modern communities has shown that the vigorous growth and healthful functional activity of any political system is dependent upon the close adjustment of three factors: political ideas, political forms and political problems. A lack of harmony between any two of these soon becomes a source of weakness in the body politic. Real progress, as distinguished from temporary expedients, is to be measured by the degree of mutual adaptation.

*Address delivered before the National Municipal League, at Louisville, May 6th, 1897.

The lack of definite civic standards and ideals, the absence of an intense city life, the failure to develop a distinctive form of municipal government and to establish definite relations between the municipality and the state, constitute the main counts in the indictment against our existing system. Whatever may be the proximate causes ascribed to these shortcomings, a close analysis will show, at the basis of each, a lack of adjustment between two of the factors above mentioned.

The relation between the *form* of city government and the *nature of city problems*, is the first to demand our attention. Instead of organizing our municipalities with due reference to the problems with which they have to deal, we have consciously and unconsciously applied analogies taken from our state and national governments. The attempt is made to separate the executive from the legislative on the ground that the plan has worked well in other parts of our political system. We must have an independent executive at all costs. The legislative organ is then divided into two branches with a view to obtaining a system of self-acting guarantees against hasty or ill-advised action. In doing this we do not stop to think that city problems are primarily of an administrative, rather than of a political character; that the conditions demanding an independent executive and justifying a bi-cameral legislative, are wanting. When, as in England of the eighteenth century, a system of guarantees to personal and property rights was being developed, the maintenance of the line of division between executive and legislative was essential to political progress. Where fundamental civil and political rights were at stake the "*checks and balances*" inherent in a bi-cameral legislature constituted one of the elements of political strength. The adoption of these principles of organization in our state and federal systems may be justified by the same set of considerations. As regards our city governments, however, none of these conditions are present. Neither the mayor nor councils can encroach upon the civil and political rights of the citizen. Furthermore, city conditions do not offer the possibility of a bi-cameral system in which each House shall rest on constituencies or constituent districts different *in kind*. Yet this is the basic principle of any bi-cameral system. The result is that we get two branches of the local legislature of much the same make-up, between which there is a constant shifting of responsibility. The

situation is further complicated by the introduction of another generally accepted canon of political organization, viz: that of district representation. Out of the dickerings of petty local interests we expect to develop a progressive municipal policy. The most cursory examination of municipal problems will show that they must be considered from the standpoint of the community viewed as a unit, and that the governmental machinery must be such as to favor rather than to impede positive action. The greatest danger in our present municipal system, is the lack of continuous and effective responsibility. Not a responsibility enforced at stated intervals, but continuously applied to municipal organs. To endeavor to pit the different governmental bodies against one another is the surest means of diffusing responsibility and thereby courting the introduction of the baneful influences that have marred our municipal history.

Another instance of a complete failure of adjustment, and one closely connected with the preceding, is to be found in the relation existing between our political ideas and methods of political reasoning, on the one hand, and the form of municipal government, on the other. I shall limit myself to one of the fundamental political ideas of the American people—that of popular government. The elective principle must pervade every branch of the governmental system in order to satisfy our idea of popular government. It is a principle which, for a long time, was consistently applied throughout our municipal system. We proceeded on the assumption that the best means of ensuring responsibility is through popular vote, completely ignoring the fact that for offices requiring preparatory professional and technical training, popular opinion *cannot* apply the proper standards, nor popular vote enforce responsibility. The evils to which this abuse of the elective principle led, have driven us, in the larger cities, to another system. But what is the nature of the change we have made? The elective principle, it is true, has been sacrificed in certain cases. A system of appointment of departmental heads by the mayor, has been adopted. Instead, however, of recognizing that from the very nature of departmental work these officials must enjoy fixity of tenure, we have taken analogies from our federal system. These officials, it is said, must be in harmony with the views of the mayor; they should constitute his cabinet. Each incoming mayor is expected to

select persons of his own way of thinking. In fact, such change is regarded as one of the means of registering the will of the people. And yet, a little reflection will show that what is demanded of heads of departments is the ability to suggest the method of executing public works to the city council, and to carry out in the most economical and efficient manner, the policy as determined by that body. But this is made practically impossible under the system of short tenure. It prevents the acquiring of that intimate knowledge of departmental work so necessary to efficient service, and acts as a deterrent to the adoption of schemes of improvement extending over more than three or four years. It also leads to the supremacy of party considerations in the administration of municipal affairs.

The root of the evil lies in the application of the idea of responsibility to municipal affairs. That individual responsibility of some kind must exist, goes without saying. But it is equally true that the responsibility in the administration of municipal departments is different in kind from that which must obtain in the administration of national affairs. In the former few broad questions of political policy upon which each individual may and actually does have an opinion, are involved. The details of departmental administration in our cities can never be made the subject of intelligent judgment by the mass of electors. The result is that the efficiency of a departmental head is usually gauged by one or two subordinate facts which happened to attract the attention of the people. What form, then, shall departmental responsibility take? It may be necessary during a transition period, as suggested by Prof. Goodnow, to make such heads of departments responsible to departmental boards, appointed by the mayor. The ultimate solution, however, will give us a system of direct responsibility to a comparatively small single-chambered council. In this way only, can permanent heads of departments be held to continuous and effective responsibility. I am deeply conscious of the fact that this implied plea for the rehabilitation of the local representative body will be received in many quarters with a smile. And yet it is the only system which meets the requirements of modern democratic ideas and at the same time takes due cognizance of the intrinsic nature of the work in which our municipalities are engaged. In the last analysis, continuous and effective enforcement of responsibility,

depends upon the active civic standards of the community—standards which can readily be applied to a city council so organized as to prevent the frittering away of responsibility. Let us retain our elective Mayor with independent powers. It is a system to which we are committed. But let us not degrade the elective council to a mere shadow of political existence. By doing this, we remove the greatest incentive to continuous activity and alertness on the part of the citizen body—which is the price of all good government. The dangers involved in any other system are especially great in the United States where the desire to construct self-acting, labor-saving devices extends to all departments of our national life. Many of the recent radical changes give evidence of a purpose to construct a mechanism of government which, once set in motion, will run of its own inherent force, to be re-wound or put on another track every four years.

The discussion up to this point has had to do mainly with the organization of our municipal institutions. A question of far greater complexity remains to be considered. The proper adjustment of our civic and political standards to the conditions of city life is a matter of such fundamental importance that upon it the whole municipal problem may be said to rest. Viewed in this light, municipal reform becomes something more than a governmental problem. It assumes the proportions of a great social problem upon which the future of the race depends. That the city is something more than a mere aggregate of individuals, requires no further demonstration. But that the peculiar conditions developing out of such close aggregation demand a change in our civic and political standards, is a fact which has not received such general recognition. An examination of the conditions of city life, especially in the large centres of population, will show the far-reaching effects of two leading characteristics.

First: The close interdependence of the units and the sensitiveness of the whole body politic to the standards of individual action.

Second: The artificial character of the city environment.

The simple and elementary fact of the concentration of population within a comparatively small area, brings with it the necessity of adapting individual conduct to such new conditions. A new concept of individual responsibility and of the possibilities of organized action must be developed.

But what, it will be asked, is the nature of these higher civic standards; and what circumstances or forces are to contribute to their development? The usual answer to this question may be summarized as follows: "Once get the people to appre-"ciate the fact that good city government pays, that the "material advantages to be derived from the efficient perform-"ance of services will more than compensate the energy "expended,—and your problem is solved." While I would fully recognize the importance of this factor in certain specific cases, I feel equally certain that it does not and *cannot* furnish the permanent basis for civic progress. Such advance must come, if it comes at all, from new standards of action, created through the recognition of the full meaning of a better city environment; and from the belief that the city contains within itself the possibility of the highest type of social life. Under such conditions, civic activity results, not from the balancing of effort and return, but rather from the new meaning which the city as an organic, and in many respects ideal, unit has attained. If we stop for a moment to consider the motives underlying the devotion to national honor and dignity and the ever-ready and willing sacrifice in the interest of the "home," the tremendous power of this civic force will be apparent. As yet, however, no such traditions and associations have clustered themselves about our American cities. I am inclined to believe that we have gone too far in making participation in city affairs a matter of profit-and-loss calculation. We are continually asking ourselves whether it pays to take an hour from business activity, or from family comforts, to be devoted to the good of our city? So long as the city represents little more than an ordinary private corporation, furnishing police protection, drainage, water, etc., a negative answer is to be expected from large sections of the population. Take the attitude of the great middle class. The tidiness of the household interior is a matter of great pride, but no æsthetic or moral sense is disturbed by filthy streets, or if so, the disturbance is but momentary. The garden or small back-yard enjoyed in the seclusion of the family is weighed against a public park system, resulting in indifference to the latter. A public supply of pure water is balanced with the possibility of purchasing a private filter. The discomforts of the over-crowded street-car do not weigh heavily upon us, because the ride represents the com-

paratively short period between the exclusiveness of the business and the isolation of the home. I am fully aware that these facts imply many admirable qualities, but they also show grave defects in our civic life. To supply the deficiency is at present the primary problem of American city life. Is it possible for the community to adopt, consciously, a policy favoring the growth of the new civic standards, or are we entirely dependent upon the play of natural forces, the slow process of the struggle for existence and the survival of the fittest?

The answer to this question would necessitate an exhaustive examination of the conditions of the city environment, the process of natural selection and the probability of the survival of a higher type through the operation of this process. Whatever future investigation may show, our present knowledge of the process of social evolution points to possibilities in municipal activity which have been completely neglected in most of the American cities. By far the strongest force at the disposal of the municipality, is the influence of organized effort on the standard of life of the community. When combined with this we have the clear recognition by the citizen body of the influence thus exerted, an irresistible force making for civic progress is at work. The possibilities here involved, were strongly impressed upon me during a recent tour of the English and Scotch cities. Their experience is of particular value to us, because of the great similarity in environmental conditions. Even the casual observer cannot help but feel that the British town population is developing a new concept of municipal activity, that it has begun to realize that upon the concerted action of the community depends, to a very large extent, the kind of life which the mass of the community is to lead. The first glimpse of the truth of this fact brings with it a new attitude towards the city. Two classes of activities are of special importance in this respect.

First: Those directly modifying the environment, and thus indirectly influencing the standard of life.

Second: Those directly affecting the standard through the offering of new services or commodities.

As regards the first of these, we have to deal with what must be recognized as the leading factor in social evolution—the environment. While in the animal world, the adaptation to purely natural conditions and the unrestricted struggle for

existence may be necessary to preserve "the speed of the "antelope undiminished and the sight of the eagle undimmed," the moment we enter the field of human society, we have the struggle modified at many points, due to the development of social instincts, groupal and class feelings. And it is well that it is so, for as Professor Huxley has shown, evolution does not necessarily mean progress, nor is the cosmic process necessarily identical with the ethical process. With the growth of social relations incident to the development of city life, man becomes, to an increasing extent, the product of social as distinguished from purely natural forces. His mental and moral traits are still largely determined by the environment, but it is an environment furnished him by the community, rather than by nature. This view of the subject carries with it a new element of responsibility. If the city environment is to determine the character of the city man, the importance of making the environment favorable to the development of the highest type becomes apparent. Everyone will admit that it is within the power of the municipality to modify, to an indefinite extent, the character of its environment. Of this fact the history of Paris furnishes a striking instance. The reconstruction of many portions of the city during the Second Empire has been the means of developing in the population that artistic appreciation which distinguishes the population of Paris from that of the other large cities of the civilized world. It has, furthermore, developed that devotion to the city which constitutes the most inspiring element in the life of the French capital. Whatever may be the shortcomings in the political life of the French nation, there is a sensitiveness and alertness of public opinion in city affairs which is foreign to our American cities. In this process the environment, as formed by the community in its organized capacity; the splendid avenues and boulevards, the dignified and imposing public buildings, the judicious distribution of parks, etc., has played the most important part. And this, notwithstanding the fact that many important services have been neglected by the municipality. Paris does not offer a model to be imitated in every detail, but it does furnish the most striking instance of the influence of the objective environment on civic activity. In a word, the environment may be made the most potent factor in moral and aesthetic education, or it may exert a degrading and enervating influence. We have an

excellent illustration of the truth of this principle in the activity of some of the English and Scotch cities under the "Housing of the Working Classes Act." In Glasgow, Birmingham, London, etc., great districts have been remodelled and re-built by the municipalities, thus creating a new environment for large classes of the population, an environment which has reacted with great force upon the mode of life of the population immediately affected, and indirectly, upon the civic life of the community as a whole.

I take as one, from a great number of available instances, the Bethnal Green Improvement recently completed under the direction of the London County Council. In this district of the East End, an area of some fifteen acres of closely built-up slum property was expropriated, the buildings demolished, and a new city built upon the cleared area. Streets sixty feet wide, arranged upon the radial plan, model tenement houses complete in every detail, a common laundry and reading room, and other social institutions have been provided. In short, the possibility of a new and higher mode of life has been offered to the population. The environment calls for higher standards, to which the population will always respond; in fact, from the very conditions of the case, *must* respond. Parks and playgrounds exert influences of exactly the same character. Instead of the gutter or alley, with the kind of amusements which they permit, a new and wider freedom is given to the child. The saloon need no longer furnish the only cheerful environment to the adult.

In the administration of city services, especially the municipal industrial enterprises, similar ends must be kept in view. In our American cities, the gas and street railway services have never been viewed in the light of their social function. The former, while in many cases under direct municipal management, has been controlled by purely financial considerations. The latter has been uniformly managed by private corporations. Here again, the recent experience of English cities is extremely significant. The street railway systems of Glasgow and Sheffield which are under direct municipal management, are being used as a means of effecting a better distribution of population. The rates of fare are so adjusted as to offer direct inducement to the laboring classes to move into outlying districts instead of congregating in the central and already over-crowded por-

tions. The one and two-cent fares during the early morning and evening hours, have been the means of bringing large numbers into a new environment. Recently, the city has decided to go one step further in offering model tenements in the peripheral districts. This may seem a dangerous extension of function, and yet it is but the logical outcome of a recognition of the true relation of the community to its environment. In the administration of the gas service, similar ends have been pursued although not always with the same conscious purpose. The use of gas in England, amongst the working classes, is not as general as in the United States, a fact which does not affect the general principle. In order to make its use an integral part of the standard of life, it was necessary to sacrifice, to a certain extent, the purely financial end. To effect the introduction of a new commodity into the standard of life, it is necessary that the utility of that commodity should exceed its cost to a degree greater than that of some one of the elements making up the existing standard. In other words the commodity must appear more desirable to the individual than some other he has been in the habit of purchasing. Every inducement to use gas for both heating and lighting purposes was offered. The price was gradually reduced until at the present time :—

Glasgow offers gas at	58c.*	per	100	cubic feet.
Bradford	" 58c.	"	"	
Manchester	" 56c.	"	"	
Leeds	" 54c.	"	"	

As an additional inducement penny-in-the-slot meters were introduced in most of the cities, of which Leeds has 1,300 in operation, Birmingham 2,000, and Manchester 11,500. A similar policy is now being adopted in the electric light service.

I have dwelt at some length, upon the influence of municipal activity upon the environment, because of its special importance at the present time. The marvelous increase in productive capacity during the century has become one of the commonplaces of economic discussion. With this there has come a corresponding rise in the income of all classes. The question as to which class was benefited most by the change is here irrelevant. That the average income of each class is higher than at the beginning of the century, has been abundantly proven. Not only has the

* The shilling is valued at 25c. in this table.

average income increased, but the hours of labor, especially of the laboring classes, have been steadily diminishing. For the first time in the history of modern countries, leisure has become a reality to all classes. This is particularly true in the large cities where, with the shortest working day we have combined the highest average income. While this increase of income has been dwelt upon by many writers, but little attention has been given to the use made of the leisure thus acquired. We have hardly begun to realize the extent to which its use is dependent on the opportunities offered by the community, and how closely it is bound up with the character of the environment. With an unfavorable environment, leisure inevitably becomes the source of racial degeneracy and social disintegration. Under favorable conditions, on the other hand, it constitutes one of the strongest forces making for progress. At a certain stage in social evolution, the possibility of leisure becomes the condition requisite to further progress. The manner of its use will determine whether the community is to take the next step in progressive evolution, or whether the temptations which leisure brings with it will lead to retrogression and ultimate dissolution. Viewed in this light, the judicious distribution of parks, play and recreation grounds, the adjustment of street-railway fares with a view to promoting travel, the creation of a system of municipal theatres offering the best that dramatic literature affords—all of these institutions, and many more, acquire a new significance. When the failure to provide a proper environment leads to the development of forces endangering the future of the race, the question of municipal activity becomes one of fundamental importance. When the creation of new municipal institutions means a new *mode* of life, and with it a new *view* of life for the large mass of the community, the question of the attitude of the population towards the city and its government is one upon which future progress depends.

The city is no longer regarded as a necessary evil. It is recognized as the accompanying factor of all civilization. Only under the conditions of city life can the possibilities of human development be realized. But this does not mean that the city should be a monotonous succession of narrow and depressing thoroughfares, that every available open space should be covered with flaring signs, that at every street corner there should be a

saloon and that every individual should be permitted to give free range to his fancy in the erection of dwellings. Through the ruralization of the city, through the erection of imposing and inspiring public buildings, through a change in the immediate environment of the poorer classes, and finally, through the acceptance of the social standard in the performance of municipal services, a new conception of municipal activity, and with it of city life, will be attained.

The question of greatest interest in this connection, one which is fundamental to the view of the subject here outlined, is the ultimate effect of this view of municipal services on the civic standards and activities of the community. The great problem of the social reformer, it has been said, is to get the people to use their imagination. John Stuart Mill put this in another form when he said that "one person with a belief is a social power equal to ninety-nine who have only interests." The belief in the possibility of a higher type of civic life can only come from the creation of new ideals. The primary elements of such ideals must be found in existing conditions. In other words, the individual must find the primary elements in existing municipal services and institutions. He is then in a position to make new combinations, to add new elements to such combinations, and finally, to picture to himself an ideal city environment. The first effect of this change will be of a negative character. The community will no longer tolerate methods of action which are now regarded with indifference. A new sensitiveness which is the necessary prerequisite to higher standards, will be developed. The over-crowded street car, the advertisement-covered fence, the chimney-like sky-scraper, the filthy alley-ways, will arouse the active condemnation of the community. Opinion will thus reach its true position as a great social force in city life. From these more negative standards, there will be a gradual transition to, or as is more probable, a gradual accreation of, positive standards. As the home, the church, the club, the voluntary political organization demand and are cheerfully given time, energy and devotion, so will the new civic standards based upon these city ideals demand and guarantee that devotion to the public good upon which the future of American city life and the efficient working of all forms of government must ultimately depend.

THE CITY'S PURSE.*

By Henry de Forest Baldwin.

The city of New York besides being the largest and one of the oldest cities in the United States has an added interest from having almost from its foundation been governed as a municipal corporation enjoying a considerable measure of self government. The large and valuable grants and gifts that have been made to it, its great revenues, the amounts it has expended for public improvements and its large annual budget, not to mention the enormous sums which are known to have been stolen from it from time to time, make a study of its financial history both interesting and profitable. The purse of this largest and richest of American cities has for many years had an irresistible attraction for many of its citizens who, appreciating its resources, have sought to direct the channels through which it should be emptied, and ought to be of equal interest to those who, while not seeking to have direct control of its expenditures, are nevertheless called upon to fill it.

In discussing this subject it is well at the outset to call attention to the distinction between the city of New York as a public corporation having to a certain extent the same position before the law as a private person, and the city as an agent of the state government. The city collects the state taxes; provides for the state militia; protects property; and pays the state officers who perform their duties within its limits, such as the judges and other officers who belong to the state judicial system. It controls the opening and improvement of streets and roads, which are state highways, and to which the city holds title as trustee for the people of the whole state. The corporation known as The Mayor, Aldermen and Commonalty of the City of New York and its officers are concerned with these matters merely as agents of the state

* Originally delivered as a lecture in the normal course of the City Lectures Committee. The tables and diagrams following were used to illustrate the text.

government. But in addition to the duties which devolve upon the city as an agent, it has an independent existence which must be clearly distinguished if we are to understand its financial system. It is a corporation, partial membership in which can be acquired by any one who comes to live within its territorial boundaries; while full membership, with the power to vote for its officers or to be voted for to fill office, can easily be acquired by mere length of residence and compliance with certain formalities. The corporation can sue and be sued. It owns property which even the state legislature cannot take away from it except under the right of Eminent Domain, in which case compensation must be made to it as if it were a private citizen. In its corporate capacity the city owns its public buildings, and its parks; its water supply system which it has built and which it operates in the same way as a gas company carries on its business; and its docks, ferries and considerable real estate which it leases to private persons as any other landlord. As a proprietor, the city has no political questions to deal with; it is the state to which we look to guarantee to us civil liberty, to protect our lives and property and to give us the benefits of a republican form of government. Consequently the city's activities as a corporation and a proprietor are to be looked at from the business side and are to be judged largely by their results in making the advantages of dwelling within its boundaries so great that more and more people seek to profit by them. But it must not be inferred that the city's functions as agent for the state and its functions as a corporation are precisely defined and separated. They are, on the contrary, sometimes very closely united and in many ways mixed up. For instance, although streets are state highways, their improvement is a large part of the city's work and has such a close connection with the city's prosperity and so little connection with the state that we must look upon this as a municipal matter. The Mayor at one time presided at criminal trials and was a most important criminal magistrate. The Recorder was originally as much a municipal officer as the Mayor with similar duties as a magistrate. The Recorder, however, has become in course of time principally a judicial officer, a part of the state judicial machinery, with incidental duties as an officer of the corporation; while the Mayor is a magistrate merely in name, and almost exclusively a civil officer. The tendency of

our legislation is to differentiate more and more municipal and state functions.

Of course many causes beyond the control of the city government are far more influential in the city's destiny than those within such control. The natural advantages of situation insure a certain degree of success to New York whatever its government. General political events also have their influence upon the city's destiny. For example, our state policy with regard to the taxation of personal property has driven many wealthy men to Tarrytown, Newport and Lakewood, and many industrial enterprises into New Jersey and Pennsylvania. But given its situation and its advantages or disadvantages from political causes, the administration of a city can within very considerable limits bring it success or the reverse. Bad government or short-sighted government can overcome economic advantages and drive away those who might otherwise want to come and live within its limits. Our backwardness in improving and sewering the district north of the Harlem River between 1870 and 1890 increased the population of Brooklyn and the New Jersey towns and injured New York. The rapidity of improvements in that section since 1890 has added to its population and to the value of its real estate. Too rapid expenditure for improvements and extravagant government has retarded Brooklyn's growth and the value of Brooklyn property. The same thing has happened to an even greater extent in some of the New Jersey towns.

Whether or not one assents to the current doctrine that the government of cities is business and not politics, municipal taxation, expenditure and debt can very profitably be considered as strictly business questions. In examining into the condition of a business enterprise it would be natural to ask for a statement of the assets and liabilities at a given time, and of the receipts and expenditures for a given period. So, in considering the "City's Purse," what the city owns; what it owes; its income and how its purse is filled; and its expenditures and how its purse is emptied, should be taken up in order.

WHAT THE CITY OWNS.

The great inheritance of the City of New York is its geographical situation. The magnificent harbor which receives the

broad and deep waters of the Hudson, its central position on the coast and the climate, which makes it healthful and easy of access at all times in the year, are of course the foundation of the city's wealth. But besides the many advantages of situation which the city enjoys, the corporation was peculiarly fortunate in receiving great and valuable grants in its early history. Under its ancient charters the corporation known as The Mayor, Aldermen and Commonalty of the City of New York, was given, beside the city hall, jails, and court houses (I quote from the Montgomerie charter of 1730), "the five market houses, the great dock, the new crane and wharf, with the common sewer leading through the great dock and bridge and also the magazine or powder house near the fresh water, all in the City of New York, and the ferry and ferries on both sides of the East River and all other ferries now and hereafter to be erected and established all round the island of Manhattan's and the management and rule of and all fees, ferriages and perquisites to the same or any part thereof belonging or to belong, and also the ferry houses on Nassau Island with the barns, stables, pen or pounds, and lot of ground thereto belonging and also all the ground, soil or land between high water and low water mark on the said island of Nassau from the east side of the place called Wallabout to the west side of Red Hook, and also to make laws and rules for the governing and well ordering of all the ferries now erected or established or hereafter to be erected or established round the said island Manhattan's and all the waste, vacant, unpatented and unappropriated land lying and being within the said city of New York and on Manhattan's Island aforesaid extending to low water mark, together with the right, benefit and advantage of all docks, wharfs, cranes and slips or small docks within this city, with the wharfage, cranage and dockage, and all issues, rents, profits and advantages arising or to arise or accrue by or from all or any of them. * * * * *"

The next section grants to the city a strip of land lying in the Hudson River within four hundred feet of low water mark from Bestaver's killitie or rivulet (near the present King Street) to Marketfield Street (now Battery Place) and a strip of land lying in the East River within four hundred feet of low water mark from the north side of Corlear's Hook (now Houston Street), to Whitehall Street. Subsequently the city was granted the land under water extending four hundred feet beyond low water mark

into the river north of Bestaver's killitie to a point almost four miles north near Seventy-fifth Street and from Corlear's Hook to a point two miles north thereof to almost Fortieth Street. By the laws of 1826 the city received a similar grant to land under water extending to Spuyten Duyvil Creek on the North River and to the Harlem River on the east side. Its rights in most of its water front thus antedate the State and National governments and the legislature has no more power to interfere with them than it has to interfere with the property of private citizens. Unfortunately these rights have not been preserved with the care which such a princely heritage deserved; and the city having granted away the greater part of its water front is now taking it back through condemnation proceedings. The common lands granted to the city have for the most part been sold to pay for our public improvements, although many of our public institutions have received their sites through this source.

Another property the value of which the city in past times has failed to appreciate is its public franchises. We have lately heard a great deal about gas companies which pay nothing to the city for their great privileges. It is said that the entire capital stock of the New York City companies fairly represents the value of their franchises and that their bonded indebtedness represents the outlay for their plants. Certainly the amount of the bonded indebtedness of the street railroad companies would be sufficient to duplicate all their plants which would leave their capital stock to represent what the city has parted with for little or nothing. The gas companies of New York are capitalized at about $48,000,000 and pay in dividends about $4,500,000 per annum on their stock, most of which does not represent any cash investment. The capital stock of the street car lines in this city is worth about $45,000,000; that of the elevated railroads about $30,000,000, making $75,000,000. The telephone, telegraph and electric light companies possess valuable concessions for which the people receive no adequate return. Roughly speaking New York City has probably parted with the title to assets of this description worth $150,000,000. While most cities are no better off than New York in this respect it is interesting to notice that Berlin in 1892 received from its gas works over and above the cost of lighting the streets and public buildings $1,250,000, and that Paris in 1890 received from private gas companies $3,700,000 and after paying

$1,360,000 for lighting its streets and public buildings (about what New York City pays) had remaining a net revenue from the gas companies of $2,300,000. From franchises of various kinds Paris in 1890 received $7,500,000.

New York City's markets, Croton water works, docks, ferries and other city properties bring it in a large revenue. The city owns the block between Duane, Reade, West and Washington Streets and many other parcels of real estate, some of them in Brooklyn, which are not in public use but which it rents to tenants. Then of course every new public building and every new park adds much to the city's accumulated wealth. Each year transmits the past accumulation to the following year.

And in speaking of what the city owns we must not forget to mention the many institutions with which the liberality of private individuals has endowed it. Its hospitals, museums, libraries, colleges, schools and reformatories, free gifts to the people of the city, constitute no small part of its wealth although partly or wholly under private control.

In 1855 the estimated value of city property as stated in the manual of the Common Council was $41,432,326 of which $15,000,000 represented the then New Croton Aqueduct. In 1871 Anthony J. Bleecker, Courtlandt Palmer and Adrian H. Muller, were appointed a commission to appraise the city's property which they valued at $277,000,000. After 1871 and prior to 1894 the city expended more than $12,000,000 on parks ($9,000,000 of this was expended for parks in the 23d and 24th Wards) $30,000,000 for the new Aqueduct and also purchased West Washington Market. In 1893 it owned 142 piers which were then estimated to be worth $30,000,000. It had also acquired many new police stations, fire houses, school houses and court houses. The new Criminal Court House cost $1,800,000. The city had also acquired the establishments at Islip and Riker's Island. Mayor Gilroy in the *North American Review* for October, 1893, estimated the property of the city at that time to be worth $559,000,000, excluding the bridges and of course the street improvements. The table on p. 335 exhibits the items of these different appraisements.

ESTIMATED VALUE OF THE PROPERTY OF NEW YORK CITY.

1855. Estimate Given in the Manual of the Common Council.

Uncommuted Quit Rents and Water Grants yet to be issued	$900,000
Lots under lease without covenant of renewal	325,000
" " " with " " "	500,000
Real Estate in Brooklyn	50,000
Common Lands	500,000
Sundry lots and gores of land	250,000
Real Estate in use by Police Department	173,000
" " " " " Fire "	298,000
" " " " " Governors of Alms House	1,250,000
" " " " for Schools	1,200,000
" " " " " Markets	1,150,000
" " " " " Parks	14,761,526
Bulkheads, Wharves and Piers	8,400,000
Property in use for Ferries	1,200,000
" " " " Croton Aqueduct Department	15,475,000
Total	$41,432,326

1871. Estimate of the Commission composed of Anthony J. Bleecker, Courtlandt Palmer and Adrian H. Muller, appointed in 1871, to appraise the city's property.

Central Park 11,000 lots @ $10,000	$110,000,000
20 Smaller Parks and Places	33,000,000
Ten Public Markets	5,000,000
City lots not in public use	4,000,000
Water lots and Brooklyn lots	1,500,000
70 Piers North and East Rivers	5,000,000
Croton Aqueduct	100,000,000
Fire Department, land, buildings and equipment	3,500,000
Police Stations and land	1,500,000
School Houses and lots	6,000,000
Courts, prisons, islands	7,500,000
Total	$277,000,000

1893. Estimate of Mayor Gilroy, in the *North American Review* for October, 1893.

Central Park 11,000 lots @ about $20,000	$200,000,000
50 other Parks and Places	50,000,000
Croton Aqueduct	200,000,000
Public Markets	20,000,000
City lots not in public use	8,000,000
Docks and Piers North and East Rivers	30,000,000
Police Stations and lands	5,000,000
School Houses	15,000,000
Fire Department	5,000,000
Courts, prisons and islands	20,000,000
Water lots	3,000,000
Armories	3,000,000
Total	$559,000,000

This does not include Brooklyn Bridge ⅓ cost	$6,000,000
and the Washington Bridge	3,000,000
and the Viaduct and Central Bridge	2,200,000

He estimates the total value of all private property in New York City at $5,000,000,000, taking the valuation for taxation as being about 40% of the real value. He estimates city property per capita, $279.50; City debt per capita, $49.28; Taxes per capita per annum, $17.00.

WHAT THE CITY OWES AND WHAT ITS DEBT REPRESENTS.*

The city's permanent debt outstanding at the end of the year 1895 amounted to $185,588,597.08. About $35,000,000 of this is for old debts, the largest part of which dates back to the days of the Tweed Ring or immediately thereafter. Nearly $24,000,000 is for parks; more than $44,000,000 for the Croton water improvements; more than $27,000,000 for docks; between $5,000,000 and $6,000,000 for the Brooklyn Bridge; about $6,000,000 for the other bridges and approaches; nearly $19,000,000 for public buildings, of which $3,600,000 is for museums, more than $9,000,000 for school houses, and $2,500,000 for armories—nearly $22,000,000 is for street improvements.

The security for this debt is various kinds of bonds which the city has issued from time to time with the authority of the legislature. The City Consolidated Stock runs usually for twenty years. Assessment bonds are issued to meet the costs of public improvements which are to be eventually paid for by assessments levied on property deemed to be benefited by them. These bonds usually run for ten years or less with the idea that before they mature the assessments will have surely been collected and the city placed in position to redeem them.

In 1895 there was held in the Sinking Funds $75,703,087.63, making the net city debt $109,885,509.45, but of this $9,335,429.91 were assessment bonds, for the payment of which assessments are being collected and for which the city is only contingently liable, so that we have as the net funded debt, exclusive of assessment and revenue bonds, $100,530,079.54.

The debt outstanding for docks, Croton water, the Brooklyn Bridge and public markets amounts to $77,542,581.81. From these sources the city receives a revenue for the year of $6,389,237.39. The Brooklyn Bridge pays to the city nearly 3% on the amount of the outstanding bonds issued for its construction. The Croton water rents pay very nearly 9% on the outstanding bonded indebtedness on the water account.

The debt incurred for parks and for street improvements also brings in a revenue indirectly. If, for instance, $1,000,000 worth of improvements has increased the assessed value of real estate

* The Comptroller's Annual Report comes out almost a year late, so that the latest obtainable figures showing the city's debt, receipts, expenditures, etc., are for 1895.

that amount, and the tax rate is 2%, the city will collect in taxes on account of that increase in the value of property, $20,000 more than it would otherwise have received; that is to say, about two-thirds of the interest on the bonds. Of course such improvements if wisely undertaken as they usually are and economically carried out as they sometimes are not, add much more to the value of property affected thereby than the amount of their cost, so that the city is able to pay for the improvements without increasing the burden on its citizens, through obtaining greater returns from the tax levy.

Property in the 23d and 24th Wards has been assessed for local improvements about $8,600,000 since 1889. The Tax Department's valuation of property in the wards has been increased from $39,000,000 in 1889 to $84,000,000 in 1896. As excellent judges consider that property in these wards is not assessed at more than 33⅓% of its real value this would indicate an increase in actual value of $135,000,000. Between 1874 and 1889, the first fifteen years after annexation, during which period very few local improvements were undertaken, the tax valuation increased only about $16,000,000.

It will be noticed that the Sinking Fund is very large in comparison with the total debt of the city. This has its disadvantages. It ties up the greater part of the city's revenue which might be used to reduce taxation or for needed improvements during the life of the obligations for which it is pledged. Also it enables the city government to keep the tax rate down while expenses are increasing. Between 1884 and 1895 the amount held in the Sinking Fund increased nearly $41,000,000 for which amount new bonds might have been issued without increasing the net debt and consequently without exciting public comment.

There was a great increase in the amount of the net city debt between 1860 and 1872, obviously due to the stealings of the Tweed Ring, which are estimated at about $50,000,000.00. It was found after the overthrow of the ring that in addition to the funded debt of $73,000,000, which appears in the statement for 1870, there was a floating debt of about $20,000,000. Moreover, a considerable part of the assessments levied prior to 1880 were subsequently vacated on account of illegality so that several million dollars more were thus added to the city's permanent debt. New York is still paying for the stealings of its rulers during that remarkable period of its history.

The debt decreased between 1872 and 1873, and then increased very rapidly to 1874. After that, it remained about stationary, increasing a little in 1878, but on the whole gradually decreasing until the new aqueduct commenced to be paid for in 1887. In 1895 the city's debt was increased about $12,000,000. The bonds issued during that year, exclusive of $22,000,000 of revenue, and $1,400,000 of assessment bonds, amounted to $13,500,000, and were principally for docks, public buildings, bridges, parks, extension of water supply and re-paving. The money spent for water supply and docks aggregated over $3,000,000 and the property acquired will pay a direct revenue to the city. The re-paving for which $1,000,000 worth of bonds were issued will last just about through the life of the bonds so that each year will pay its due proportion of its cost.

It is often a sign of wise government that a city should have a large debt. The test lies not in the size of the debt but in what it represents. It is silly and misleading to compare the debts of cities without also comparing their respective revenues from the property for which it was incurred. If the debt is a large one but has been contracted for purposes which are paying a large revenue, obviously it is to be considered very differently from a debt incurred for improvements which pay no direct revenues. One test of the wisdom of a non-revenue bearing improvement is whether it has increased the actual value of the property supposed to be benefited by it to a greater extent than the actual cost of the improvement. The test of the wisdom of a revenue-bearing improvement may or may not be measured by the amount of revenue to be derived, but if there is derived sufficient revenue not only to pay the interest on the bonds issued to meet the costs of the improvement, but also to create a sinking fund for the extinguishment of the bonded indebtedness, then certainly it is not to be lightly condemned. It must not be forgotten that to fail to make an expenditure when good business methods require it, is a sign of inefficient and short-sighted government. For example, the Stewart building on Chambers Street and Broadway might have been acquired not many years ago for $2,000,000. The city now pays its owner more than $87,000 a year as rent for a part of it, enough to pay the interest on $2,900,000 worth of bonds. If the Register's office with its records of incalculable value should

burn up some day, we would justly find fault with our city officials for not having secured us against such a loss, by providing a suitable fire-proof depository.

THE CITY'S INCOME AND HOW THE PURSE IS FILLED.

The national revenues are mostly raised from customs duties, that is to say, taxes on consumption, and are consequently borne largely by those in poor and moderate circumstances. The state revenues are raised through an inheritance tax, liquor licenses, and direct taxes on real and personal property raised and collected by the local government and paid over to the state. The city's revenues are made up partly from property which it holds as a private owner, such as its water system, ground rents, etc.; partly from taxes on personal property; but principally from taxes on real estate. So far as these taxes are upon the land, they cannot be shifted from the landlord to the tenant. Speaking generally then, we may say that the landowners pay the city taxes.

In the reports of the Comptroller the word "revenue" is used to signify the city's income from its various properties, franchises and operations and not the proceeds of taxes or of bonds. All these revenues of the city except as otherwise appropriated go into the so-called General Fund. The receipts of this fund amount to about $2,000,000 a year besides $500,000 usually transferred to it from the Excise License Fund. But the revenues of the city from certain sources are by law and ordinance appropriated and pledged to the payment of the principal and of the interest on the city's debt. These revenues go into the Sinking Fund No. 1 and the Sinking Fund No. 2 respectively. These two sinking funds are spoken of as "the Sinking Fund." They are administered by the Commissioners of the Sinking Fund, who consist of the Mayor, the Comptroller, the Chamberlain, the Recorder, and the Chairman of the Finance Committee of the Board of Aldermen. In 1895, the amount paid into Sinking Fund No. 1 was $3,157,906, and into Sinking Fund No. 2, $4,573,175.

In addition to these three principal funds, the accounts of which are kept separate, there are a great number of funds known

as Special and Trust Accounts. One of the most important of these is the Fund for Street and Park Openings. This fund was created in 1885 after the adoption of the constitutional amendment limiting the indebtedness of cities to 10 per cent. of the assessed valuation of their real estate liable to taxation, when there was some doubt as to whether this amendment would be interpreted to mean the gross debt or the net debt after deducting the amount held in the Sinking Fund, and it became necessary to provide in some way for the awards to be paid to property owners whose land should be taken in the opening of streets and parks. In most cases the costs of a street opening are levied upon the property benefited, in the shape of assessments, the city standing between the person to whom the award goes and the persons who ultimately pay it, as a middle-man; the city pays the award when it is due and reimburses itself by collecting the assessments. But, of course, considerable time must elapse between the payment of the award and the collection by the city of the assessments. So this Fund for Street and Park Openings was created in order that there might be always a fund ready to meet when due the payment of awards and expenses of street and park openings, the fund to be supplied from the assessments collected. Occasionally when, through assessments being vacated by the courts or the legislature, or through deficiencies, or through the city's assuming a part of the cost of opening certain streets and parks, this fund becomes depleted, it is replenished by provision being made in the annual budget for the payment of whatever may be necessary out of the city treasury into the fund.

As another example of a special account we have the Washington Bridge Park Fund to provide for the cost of acquiring and improving lands about the approach to the Washington Bridge. The proceeds of bonds issued for this purpose are paid into the fund which is then ready to meet such payments as the progress of the improvement may make necessary from time to time.

The receipts of the funds known as Special and Trust Accounts aggregated $5,616,459 in 1895 exclusive of loans. Of this $200,000 paid into the Fund for Street and Park Openings was a transfer from the appropriation account. The $176,951 in the Williamsbridge Sewer Fund was found in the town treasury

upon annexation. The town in 1895 foreseeing annexation and appreciating that its debts would be assumed by New York, thought it a good plan to escape assessments for the sewer by issuing town bonds to provide for its cost. This is one case among many similar cases which shows that Wall street does not monopolize all the financial genius in Greater NewYork. The table on page 360 presents a summary of amounts exclusive of the proceeds from bonds credited to these special funds and accounts.

The city's taxes are not payable until October 1st. In Brooklyn, and, I believe, in all other cities of the state, the money collected in October from taxes goes to meet the expenses of the city government for the following year, but in New York we collect in October, 1896, taxes to meet the expenditures of the government for the year 1896. The expenses of government from January until October must be met in the meantime, and this necessitates the issuance of revenue bonds payable between November 1st and December 31st of the year of their issue in anticipation of the revenues to be afterwards collected. It is sometimes necessary to meet certain authorized expenditures, unprovided for in the budget of the current year but which are to be provided for in the budget of the following year. In such cases revenue bonds are issued payable a year from the following November. These revenue bonds are issued by the Comptroller from time to time as needed with the authority of the Board of Estimate and Apportionment.

The city's principal source of income is, of course, receipts from taxes. The Department of Taxes and Assessments discovers and values the property to be taxed. In 1895 it valued the property to be taxed at $2,016,947,662 of which $1,646,028,655, was its valuation of real property, and $370,919,007 of personal property. The real property was valued at from 10% to 60% of its actual market value, the average being about 40%. The appropriations for 1895 amounted to $40,076,960. The amount from the general fund applicable to reduce taxation was, including $500,000 from the Liquor License Fund, $2,500,000, leaving $37,576,960 to be raised by taxation. The tax levy for 1895 was $38,403,761.18—$826,801.14 having been added to the net appropriations for the year to be raised by taxation as the estimated deficiency in the production of personal taxes for 1895 from erroneous assessments, insolvencies, etc. The city collected of the taxes levied for 1895,

$34,417,347.51 and of arrears, $2,292,897.59, making a total of $36,710,242.10. Times being hard, property owners were slow in paying, and the city not disposed to enforce payment by advertising their property for sale. The tax rate in 1895 was 1.91 or $1.91 on every $100 of assessed property.

The tax rate is determined from the amount of taxes to be raised and the assessed valuation of real and personal property made by the Department of Taxes and Assessments. For instance, if the assessed valuation of property is $100.00 and $1.00 is the amount to be raised by taxation, the tax rate would be one. If the assessed valuation were cut down to $50.00 instead of $100.00 and $1.00 is to be raised by taxation the tax rate would be two. When, therefore, the tax rate in this city is $1.91 on every $100.00 worth of assessed property and a comparison is made with some other city where the tax rate is a higher or lower amount, we cannot properly compare the two unless we know whether the property of such city is assessed at a higher or lower percentage of its true value than the property in this city. In Brooklyn, property is assessed for taxation at about 80 per cent. of its actual market value; therefore, although its tax rate is 2.70, its tax burden is double that of New York. On the other hand, Peoria, Ill., has a tax rate of 9.07 but property there is assessed at only 10 per cent. of its actual market value. Hence while its tax rate is nearly four times as great as Brooklyn's, the tax burden is less than half as great. The tax rate, therefore, is not a guide to tell the real tax burden. Nor is the amount to be raised by taxation a fair index of the efficiency or wisdom of the city government. It may be that certain expenses are being paid for out of the proceeds of bonds which ought to be paid for out of the budget; that we are running in debt for things for which we should pay as we go. It may be that equipments are being allowed to wear out. It may be that public works are not being undertaken as they should be. It is worthy of remark that the tax rate is apt to be lowest when the city is being governed worst and is apt to be raised after the overthrow of a corrupt or inefficient administration.

The practical working of our tax system is such as to make it deserve the undesirable distinction of being one of the worst to be found among the governments of civilized people. It has been condemned by commission after commission who have investigated

it. Opinion among those in this city who know anything about it is all one way. No men are more vigorous in their denunciation of its iniquities than the present Tax Commissioners.

In 1870 a little over $305,000,000 of personal property was assessed for taxation. In twenty-five years this amount had increased only $66,000,000. During the same twenty-five years the assessed valuation of real property much more than doubled. Another remarkable thing is that in 1872 personal taxes were charged against 19,382 people on the Receiver's books while in 1895 but 19,283 people were so charged, and this last number is the greatest since 1872. It would be interesting to know how many of this number were executors and trustees and women living on what had been left them by their fathers and husbands. Property held by such persons, the amount being easily ascertainable from public records, is of course discoverable and taxed. The greater part of all other personal property in the city escapes through one means or another.

Of course if the tax laws were actually enforced as to personal property, the city would be depopulated, for few could afford to give up as taxes sixty or seventy per cent. of their incomes. As it is, our personal property taxes drive out of the city enough business enterprises to cause far greater loss than the amount of the taxes collected from personal property. Personal property does not get any of the benefits of public improvements, yet according to the law it is taxed for them the same as real property which does get such benefits. Strange to say, most of the large owners of real estate within the city are heartily in favor of the reform which is advocated in each legislature, that each county be allowed to collect all its taxes if it chooses out of real property alone. The country members of the legislature, however, have never been persuaded that such a provision would not operate to their disadvantage and consequently our personal property tax which works so outrageously remains upon the statute books.

Those who pay taxes on personal property are supposed to pay on the full value of their taxable property, but real estate is assessed at about 40%, rarely 60%, and sometimes less than 10% of its fair market value, notwithstanding that the Deputy Tax Commissioners must certify under oath the sum for which in their opinion the real property on their rolls "under ordinary circum-

stances would sell." An Ex-Deputy Tax Commissioner who had been ten years in office recently stated under oath that he usually assessed unimproved property at between 20% and 30% of its market value.

The reason for undervaluing real property, for purposes of taxation is to try to prevent the State of New York from getting an undue amount of money from the city as state taxes. Each county of the state is supposed to contribute to the state taxes in the same proportion that its taxable property bears to the whole taxable property in the state. The argument is that if the assessed valuation of taxable property in New York City were increased from two billion to four billion dollars the sum paid for state taxes, about $3,500,000 in 1895, would be doubled or nearly doubled and we should pay $7,000,000 to the state instead of $3,500,000. But the same system of undervaluing real property for purposes of taxation which exists in New York County exists in every county in the state except Kings. To prevent consequent injustice the State Board of Equalization was created to adjust the amounts which each county ought to pay toward the state taxes on the ground that different percentages of value were adopted by the local authorities in different counties. If the State Board of Equalization could be depended upon to act fairly toward New York, the assessment of real property at its true value instead of at a percentage of its true value would not necessarily increase New York's contribution to the state treasury. But we know from sad experience that during the last fifty years no opportunity has been missed to place upon this city an undue amount of the costs of the state government.

This system makes it almost impossible to hold our Tax Department to account for anything which it may choose to do. If my neighbor's property is assessed at ten per cent. of its real value and my property is assesssed at eighty per cent. of its real value, what remedy have I? I cannot say that it is not worth as much as it has been assessed, therefore I have no remedy and the great discrimination between my neighbor and me which has been exercised arbitrarily by the Tax Department is a thing which I cannot by any legal means prevent.

The great wrong that is done on account of this system is well illustrated in the upper part of the city. A large estate held

by some one for investment which he does not intend to improve until it has to be improved is assessed upon the tax books of the city very often lower than ten per cent. of its real value. A small lot 25 x 100 feet upon which some mechanic has put his house may be assessed at fifty or sixty per cent. of its real value. The wrong is not to be measured merely in the amount of taxes that are paid by the owners of these different pieces of property, but also in the amount of assessments for which they become liable, for the law does not allow an assessment for improvements to be placed on a man's property to a greater amount than one-half the tax valuation, that is to say, one-half the amount which appears on the tax rolls as the value of his property. It often happens, therefore, when a street is opened through a large tract which is assessed for purposes of taxation at much below its real value that the owner gets for an award the full value of the property taken, and his property remaining is assessed for benefit on account of the improvement only a small part of what it should justly pay. As a consequence the area of assessment must be extended to take in property which is benefited much less than the large undervalued tract and which must be assessed proportionately much more.

THE CITY'S EXPENSES AND HOW ITS PURSE IS EMPTIED.

The most efficient public agency in emptying the city's purse is the legislature. All extravagant enterprises, if we ever go into such, have legislative sanction. A large part of the final estimates each year are required of the city by mandatory legislation. All loans must be authorized by the legislature. It can and frequently does vacate assessments levied upon property benefited by public improvements and thus robs the public to make a gift to a favored individual,—a common legislative practice. The city is obliged to keep a representative of the Law Department continually at Albany during the sessions of the legislature, whose principal duty it is to try to prevent legislation which will necessitate large expenditures on the part of the city against the judgment of the city authorities. This has not always been the case. At one time interference by the legislature in the details of city government without the consent of the corporation was

supposed to be unconstitutional. The Montgomerie charter remained practically unchanged from 1730 to 1830. After that for forty years very little change was made without the consent of the city authorities, except in 1857, when Fernando Wood was Mayor, the Metropolitan Commissions were created. But since 1870 we have been governed from Albany. The large sums of money required to be expended by the city offer too attractive opportunities for legislative interference for us to expect that the personal and political advantages which may be obtained from such interference will ever be voluntarily relinquished. The legislature of 1896 passed 156 acts affecting New York City.

The second most important agency in emptying the city's purse is the Board of Estimate and Apportionment. This board was devised by the Tweed Ring, in order, it is said, to efficiently empty the city's purse for its own benefit. It consists of the Mayor, the Comptroller, the President of the Board of Aldermen, the Counsel to the Corporation and the President of the Department of Taxes and Assessments. Except so far as it is limited by the legislature, it is practically the governing body of the city of New York. Two members of it are appointed by the Mayor, the three others being elected. Since its creation it has worked remarkably well and has won the confidence of the public. It stands between the taxpayer and unwise expenditures. It has always been conservative and the advocate of economy. The Consolidation Act, spoken of as the city charter, requires this board to meet between the first day of August and the first day of November each year, and to "make a provisional estimate of the amounts required to pay the expenses of conducting the public business of the City and County of New York in each department and branch thereof, and of the Board of Education for the then next ensuing financial year." In this estimate it is obliged to "include such sum as may be necessary for the payment of the interest on the bonds of the said City and County which shall become due and payable within said year, and such sum, as shall be necessary to pay the principal of any bonds and stocks which may become due and payable from taxes during said year, and also so much as may be necessary to pay the proportion of the state tax required to be paid by the City and County of New York in said year." To assist them in making these estimates, the heads of departments transmit to the board

their departmental estimates, in the greatest detail, of the requirements of their departments for the coming year, including the salary of each officer or employee. After their provisional estimate is made up by the Board it is transmitted to the Board of Aldermen. Thereupon the Board of Aldermen meets and if it takes any action at all usually raises the estimates very materially. The statute says, referring to the Board of Aldermen, "It shall be their duty carefully to consider and investigate the said provisional estimate and the reasons assigned therefor." The Board of Aldermen then transmits the estimates with their objections and changes back to the Board of Estimate and Apportionment. The latter board before making its final estimate is required by the statute to give such hearing to tax payers as may be proper. It then proceeds to make up the final estimates, regardless usually of whatever action the Board of Aldermen has taken. When finally determined by the Board of Estimate and Apportionment the final estimates or the city's budget for the coming year is settled.

It is to the Board of Estimate and Apportionment that the legislature usually gives the authority to settle the plans for large public improvements for which the City is authorized to issue bonds and usually this board must authorize any particular issue of bonds. It is thus seen that the Board of Estimate and Apportionment through its absolute control of the expenditures, except so far as it is in turn controlled by the legislature, controls the city government.

The Board of Street Opening and Improvement is another important board. It consists of the Mayor, the Comptroller, the Commissioner of Public Works and the President of the Park Department, also the Commissioner of Street Improvements of the 23d and 24th Wards so far as its action deals with matters relating to those Wards. The 23d and 24th Wards embrace the territory known as the Annexed District or the North Side—that part of the city lying north of the Harlem River. This board has the power to cause to be opened streets that have been laid out on the city map. In most cases the cost of opening such streets is borne by the property deemed to be benefited, but the board has the power to say what proportion of the cost, if any, shall be borne by the city at large. It occasionally exercises this power, but has always been very conservative in doing so. In most cases

where any part of the cost of opening streets has been put upon the city it has been by special enactments of the legislature, which is always far more ready to make the city's treasury bear expense than are the city authorities.

The Board of Street Opening and Improvement also has power to change the map of the city in certain parts of it, but not in other parts, and to fix the grades of streets laid out by it, but has no power to change the grades of other streets. It is to this board that the legislature usually refers the settlement of the details of plans to lay out new streets, parks and drives. It determines on the location of new parks opened pursuant to the so-called "Small Parks Act," passed in 1887, during Mr. Hewitt's administration, authorizing the city to incur an expenditure of not more than $1,000,000 a year for the opening of small parks. To December 31st, 1895, the city might have spent $9,000,000 for small parks. It had actually spent under this act only $642,118. This failure to provide for a great public need was partly the fault of the law which was badly drawn.

The Commissioners of the Sinking Fund constitute another board. They are the trustees of the Sinking Fund and make the investments of the receipts of the Fund as they think proper, almost exclusively in the city's obligations. Small issues of city stock and revenue bonds are usually disposed of to the Sinking Fund. This board provides for the payment of the city's obligations, payable from the Sinking Fund, when they become due.

The only other board to which it is worth while to call particular attention is the Board of Aldermen. It once had considerable powers, but it has always failed to be appreciated by the public at large as a valuable part of the city government. Its powers have been gradually taken away from it and now its functions besides granting franchises consist principally in passing city ordinances permitting favored barbers to hang out poles over the sidewalk and favored newsdealers to erect stands at different points on the sidewalks and authorizing certain public improvements at the request of the Commissioner of Public Works or of the Commissioners of Street Improvements where the cost is to be met by assessments, such as grading, paving and flagging streets.

It sometimes succeeds in changing the Commissioner's plans

from paving the street with asphalt or brick to stone, or vice versa, and sometimes holds up improvements until terms can be made with the Commissioner, but beyond that their responsibility and influence on public expenditures is not very important and need not be considered here.

They also perform a function in filling the city's purse. After the Department of Taxes has determined the value of taxable property and after the Board of Estimate and Apportionment has determined the amount to be raised by taxation, the Board of Aldermen fixes the tax rate by dividing one figure by the other and certifying the result by passing an ordinance. This power has not been taken from them as it would be impossible for them to abuse it.

The Mayor has great influence through his powers of appointment and through his being the titular head of the city government. He has also great influence as a member of the various boards which carry on the city administration. But he is of far less importance, except for his appointing power than the Comptroller. The Comptroller is a member of all the important boards as well as the chief financial officer of the city. He is the executive in charge of the city treasury and the sinking funds. His administration of the first is theoretically governed by the Board of Estimate and Apportionment and of the second by the Commissioners of the Sinking Fund, but as he is from his position best acquainted with the facts and as his colleagues must rely upon him to bring them to their attention, he is the most important member of both Boards. All the members of the Board of Estimate and Apportionment must concur in the final estimates or budget, and as the chief financial officer of the city, the Comptroller often feels justified in using this power to compel his associates to agree with his views. It has often been said that the office of President of the United States was made to fit George Washington. The office of Comptroller of the City of New York was made to fit Andrew H. Green. Mr. Tilden, who had great influence in shaping the legislation affecting the city immediately after the Tweed era, procured the appointment of his friend Mr. Green as Comptroller, and so extended the powers and functions of the office that very little could go on in the city government without his knowing of it. Of course with great powers there are great opportunities to

Municipal waste is much more apt to result from spending more than is necessary for a needed improvement than from the inauguration of unnecessary improvements. It is very seldom that the city starts improvements which are not needed. Municipal economy is not in stopping improvements, but in seeing that the city gets a dollar's worth for each dollar it spends and in not giving away the city's revenue and assets. If our franchises are given away, and through the failure of the municipal authorities to protect the citizens, railroad fares are placed at five cents instead of two or three cents, the people pay a pretty big contribution on account of poor city government. If gas is $1.25 a thousand when it might be but 50 or 60 cents, if proper municipal foresight had been exercised by our officials, the people pay a pretty big contribution there. If the Board of Health does not do its duty, or is inefficient, or does not get a sufficient appropriation on account of the large amounts of money spent elsewhere, our lives and our children's lives are endangered and the increased sickness and death becomes a great drain upon the people and swallows up their savings.

If the people realized that whenever the Board of Aldermen grants a franchise for less than it is worth, the city has so much less money to spend for needed improvements; that whenever the legislature passes an act to vacate assessments for benefit which are part of the costs of a new park it makes a present to some property owners and deprives the people of the means of establishing a park at some other place; that whenever an office is run in an extravagant manner it deprives the people of something which would make life in New York City better worth living, then we should have good government.

The city's purse can be protected only through the election of honest and efficient public officers. The city's money is to be saved in the small details of administration. But even honest and efficient public servants are the better if their masters, the people, take an intelligent interest in the way they perform their work. If the people are sovereign they must occupy themselves with their domain, or see it distributed among their courtiers who bow the knee to their masters only for the opportunities which managing the estates of a careless sovereign afford.

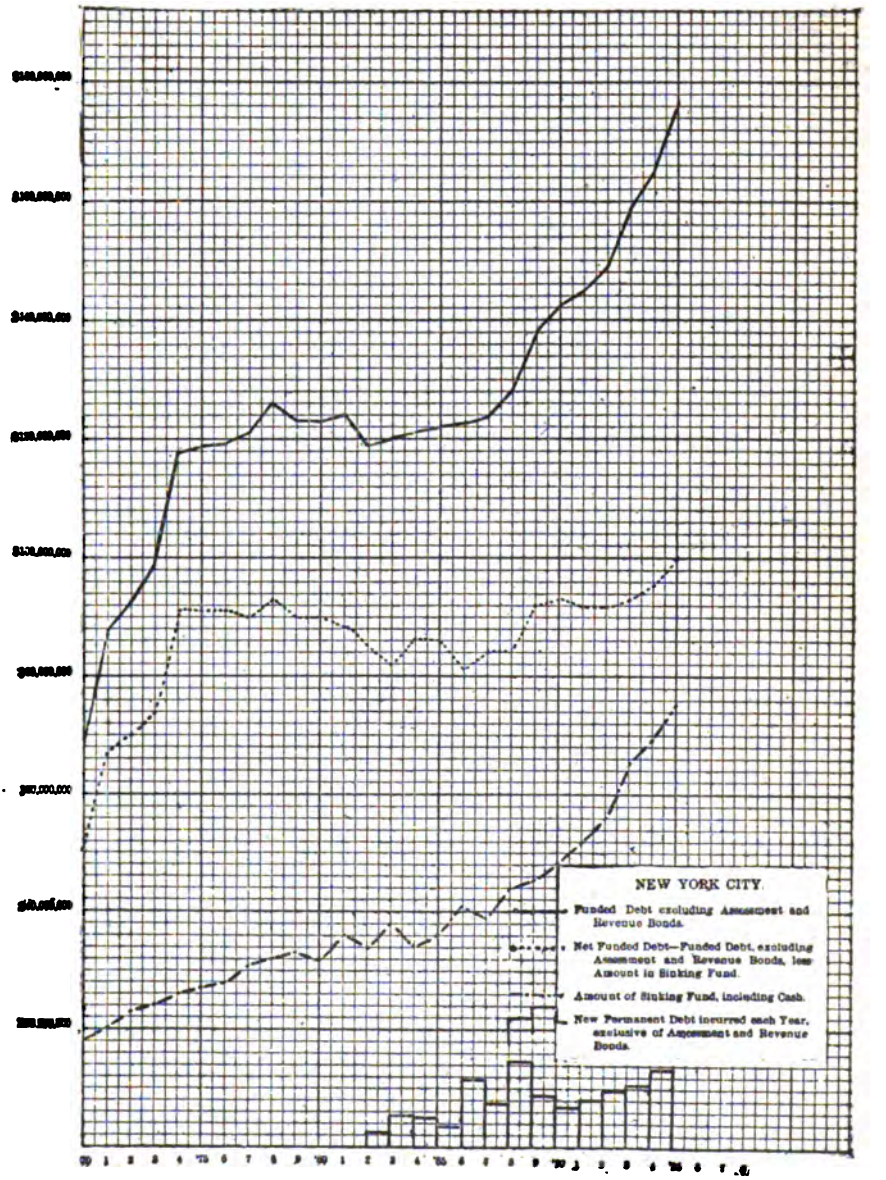
CITY DEBT, 1895.

	Total outstanding Dec. 31, 1895.	Held by Sinking Fund Commissioners.
Croton Water	$44,126,300 00	$17,967,500 00
Parks	23,670,289 68	6,390,197 68
Markets	724,715 15	684,715 15
Public Buildings.		
Museums	$3,600,000 00	
County Court House, past due	553,291 00	
Armories	2,573,000 00	
School Houses	9,048,212 00	
Sanitary Improvement of School Houses	180,880 00	
College City of N. Y	47,000 00	
Other Buildings	3,029,141 00	
		18,981,474 00
Fire Department	829,967 87	671,952 87
Street Improvement	21,817,815 51	13,978,848 15
Docks	27,053,000 00	13,366,000 00
Brooklyn Bridge	5,638,566 66	3,390,566 66
Other Bridges and Approaches	5,934,865 57	3,652,384 25
Misc., Wards Island prop. Electrozone plant, Columbus celebration, &c., &c	1,267,553,24	484,598 87
War Debt, past due	604,800 00	100,000 00
Old Debt '69 to 80, part of it past due	34,939,249 40	2,349 40
	$185,588,597 08	$69,819,527 01
Amount held in Sinking Fund	75,703,087 68	5,883,560 62
Net debt excluding Revenue Bonds,	$109,885,509 45	75,703,087 68
Assessment Bonds	9,355,429 91	
Net Permanent Debt	$100,530,079 54	

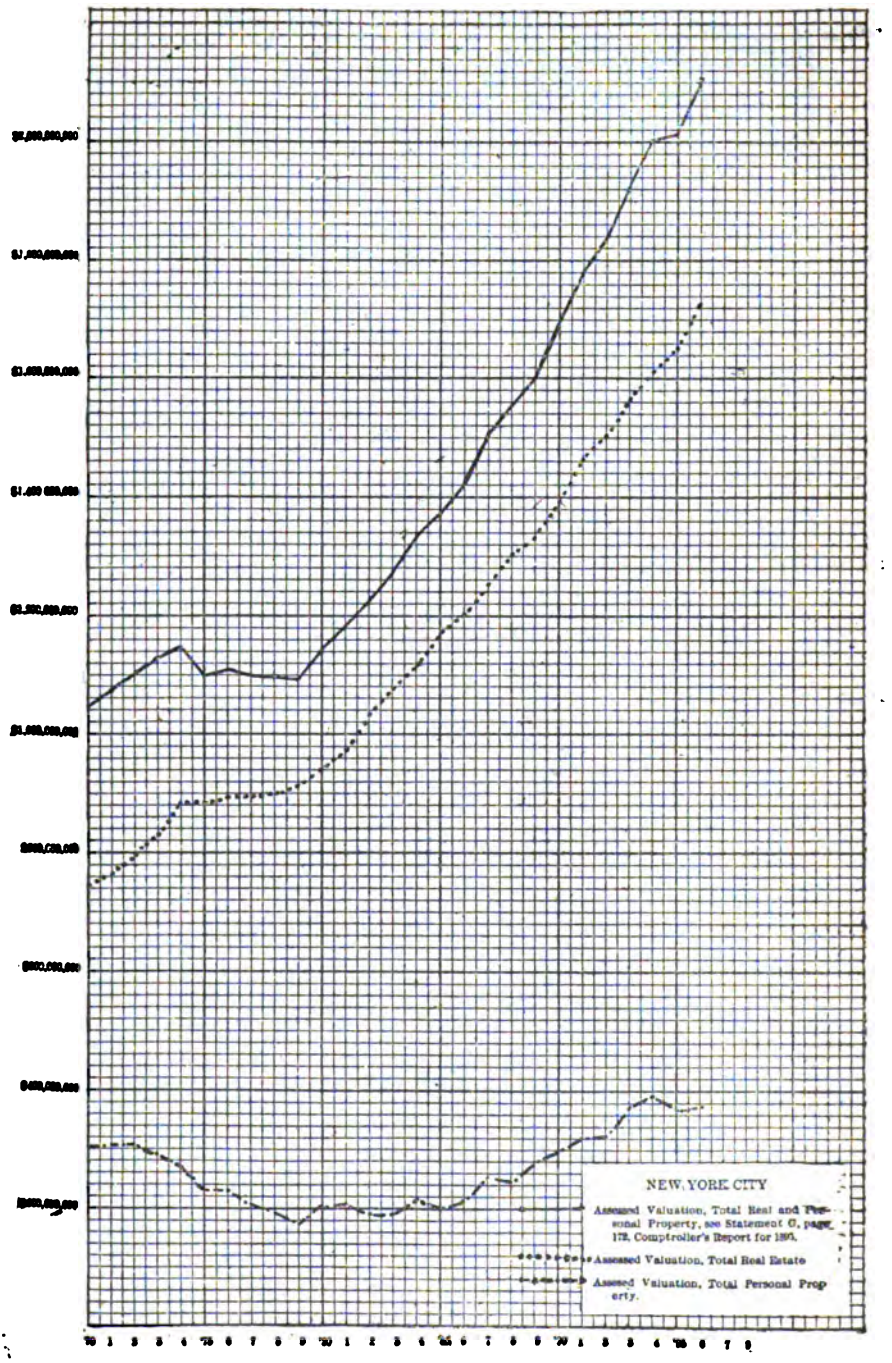
POPULATION, DEBT AND SINKING FUND OF NEW YORK CITY, 1870-1897.

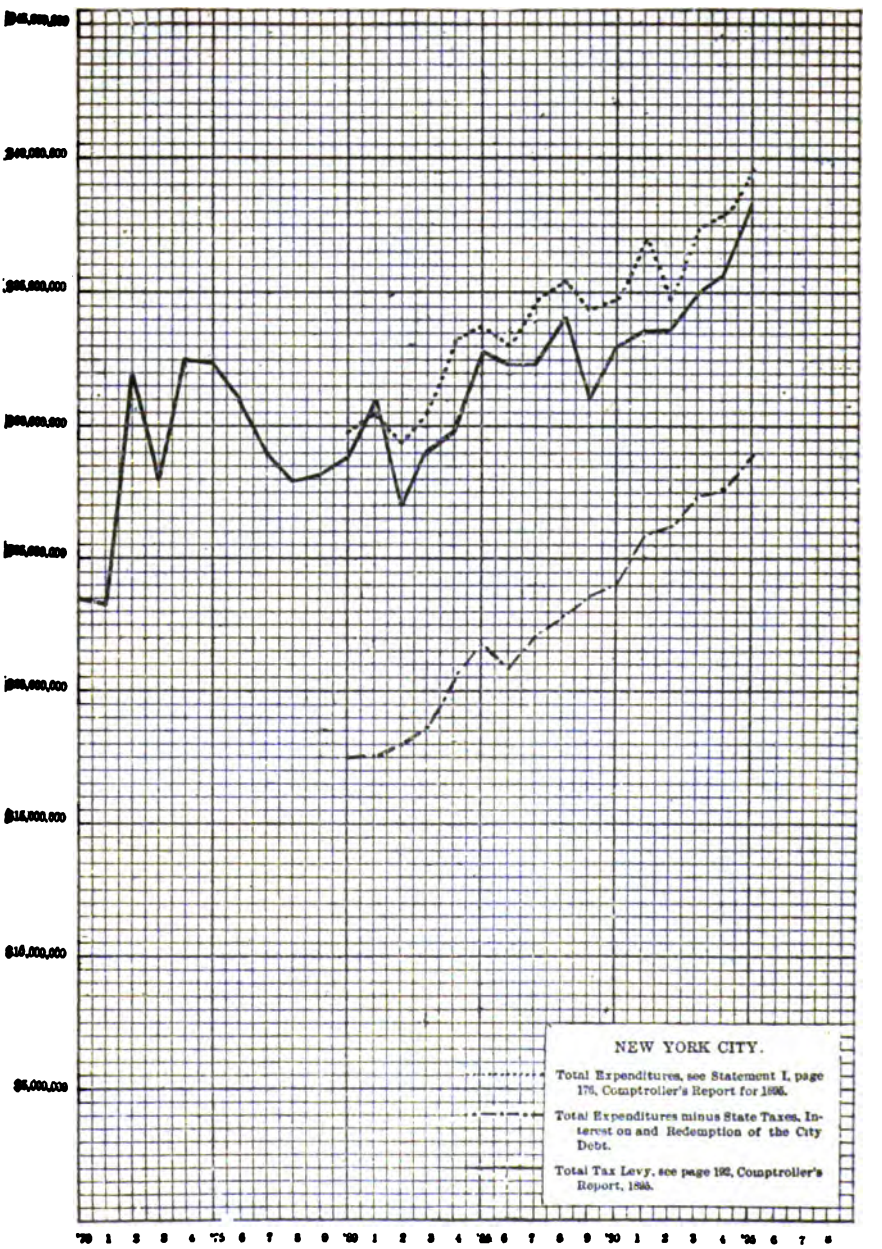
	Funded Debt Excluding Assessment and Revenue Bonds.*	Amount of Sinking Fund Including Cash.*	Net Funded Debt—Funded Debt Excluding Assessment and Revenue Bonds less Amount in Sinking Fund.*	Population.†	Per Capita Net Debt.	New Permanent Debt Incurred each Year Exclusive of Assessment and Revenue Bonds.‡
1870.....	$68,998,146 51	$18,115,894 49	$50,882,252 02	943,300	$53 94	
1871.....	87,238,608 51	20,182,321 61	67,056,286 90	955,921	70 14	
1872.....	93,773,659 97	23,348,074 89	70,425,585 08	968,710	72 70	
1873.....	99,493,219 73	24,841,100 15	74,651,119 57	981,671	76 05	
1874.....	118,241,557 24	26,823,788 01	91,417,769 23	1,030,607	88 70	
1875.....	119,056,903 54	27,748,307 30	91,308,596 24	1,044,396	87 42	
1876.....	119,631,313 28	28,296,247 40	91,335,065 88	1,075,532	84 92	
1877.....	121,440,133 15	31,120,315 24	90,319,817 91	1,107,597	81 54	
1878.....	126,128,315 82	32,143,787 83	93,985,027 99	1,140,617	82 39	
1879.....	123,145,333 66	33,021,985 70	90,123,347 96	1,174,621	76 72	
1880.....	123,176,919 87	32,993,024 00	90,183,895 87	1,209,196	74 58	
1881.....	124,724,407 07	36,110,300 90	88,614,106 17	1,244,511	70 40	
1882.....	119,817,241 66	34,332,388 49	85,484,853 17	1,280,857	66 74	
1883.....	120,707,475 43	38,134,544 96	82,572,930 47	1,318,264	62 63	$3,454,783 25
1884.....	121,319,320 61	34,823,735 48	86,495,585 13	1,356,764	63 74	5,119,150 00
1885.....	132,443,239 99	36,118,813 72	86,329,426 27	1,396,388	61 83	4,950,000 00
1886.....	122,650,735 92	41,205,470 22	81,445,265 70	1,437,170	56 67	3,875,845 47
1887.....	124,500,719 45	39,521,884 61	84,978,834 84	1,479,143	57 41	11,912,154 53
1888.....	128,347,095 46	44,324,690 12	84,022,405 34	1,522,341	55 19	7,857,215 15
1889.....	138,016,028 01	45,638,142 65	92,377,885 36	1,566,801	58 95	14,819,132 55
1890.....	142,198,022 88	48,513,793 81	93,684,230 07	1,612,559	58 09	8,878,294 87
1891.....	145,500,869 73	52,783,433 57	92,717,436 16	1,659,654	55 86	6,957,846 85
1892.....	149,344,171 00	56,532,406 58	92,811,764 42	1,708,124	54 33	8,070,116 40
1893.....	159,050,898 28	65,708,442 08	93,342,456 20	1,758,010	53 09	9,853,927 28
1894.....	165,393,039 03	69,912,260 51	95,480,778 52	1,809,353	52 07	10,486,040 75
1895.....	176,283,167 17	75,703,087 63	100,580,079 54	1,879,195	53 49	13,494,828 14
1896.....				1,934,077		
1897.....				1,990,562		

* See Statement "C," p. 153, Report of the Comptroller of the City of New York for 1895.
† Estimated for July 1st in each year by the Health Department of New York City.
‡ See Statement "B" II, p. 152, Report of the Comptroller of the City of New York for 1895.


NEW YORK CITY.
Funded Debt excluding Assessment and Revenue Bonds.
Net Funded Debt—Funded Debt, excluding Assessment and Revenue Bonds, less Amount in Sinking Fund.
Amount of Sinking Fund, including Cash.
New Permanent Debt incurred each Year, exclusive of Assessment and Revenue Bonds.

NEW YORK CITY
PER CAPITA NET DEBT.


NEW YORK CITY
Assessed Valuation, Total Real and Personal Property, see Statement G, page 172, Comptroller's Report for 1895.
Assessed Valuation, Total Real Estate
Assessed Valuation, Total Personal Property.


NEW YORK CITY.
Total Expenditures, see Statement I, page 176, Comptroller's Report for 1895.
Total Expenditures minus State Taxes, Interest on and Redemption of the City Debt.
Total Tax Levy, see page 192, Comptroller's Report, 1895.

RECEIPTS OF GENERAL FUND, 1895.

Interest on Taxes	$415,196 51		
" Assessments	202,881 91		
" Security Deposits, etc	3,132 97		
			$621,211 39
Franchises: Pipe Line	$2,587 50		
Railroad	33,326 22		
Equitable Gas-Light Co	141 35		
			36,055 07
Licenses: City Treasury, Mayor's Marshal	$40,816 75		
Street Car	50,200 00		
Plumbers' Certificates	855 00		
			$91,871 75
Forfeited Recognizances			21,112 88
School Money from State			696,069 32
City Record, Sales			4,213 13
Rents			600 00
Judgment agst. N. Y. Refrig. & C. S. Co			7,466 97
County Clerk's Office			45,390 12
Register's Office			105,275 81
Sheriff's Office			95,511 56
Coroner's Office, acting as Sheriff			1,558 25
Surrogate's Court			6,829 45
Public Administrator			11,289 33
Corporation Counsel and Law Department			20,088 88
Dept. of Public Charities and Corrections of which $15,488.56 is from State			23,298 76
Reimbursed for Support of Committed Children			3,870 60
Dep't of Parks: Licenses, Permits and Rents			36,498 44
Dep't of Public Works			58,228 86
Dep't of Street Cleaning			26,767 52
Dep't of Street Improvements 23d and 24th Wards			11,160 42
Dock Dep't: Sale of Old Materials			103 05
Health Dep't			23 70
Inspectors and Sealers of Weights and Measures			5,782 92
Sundry Items and "Conscience"			3,547 14
			$1,933,764 82

CITY REVENUES PLEDGED TO SINKING FUND, 1895,

Sinking Fund No. 1, for the Redemption of the City Debt.	
Market Rents	$292,458 38
Docks and Slips Rent	2,084,883 59
N. Y. and Bklyn. Bridge. Surplus rev	160,000 00
Railroad and other Franchises	268,762 70
Interest on Deposits of City Funds	91,555 30
Licenses	82,942 50
Street Vaults	156,340 10
Bonds and Mortgages	17,770 00
Other items	3,795 03
	$3,157,906 60
Sinking Fund No. 2, for the Payment of Interest on the City Debt.	
Ferry Rent	$336,563 32
House, Ground and Water Lot Rents	106,874 27
Croton Water Rents and Interest thereon	3,852,396 42
Court Fees and Fines and Penalties	268,762 84
Interest on Bonds and Mortgages	6,579 10
	$4,573,175 95

SUMMARY OF RECEIPTS OF SPECIAL AND TRUST ACCOUNTS, 1895.

Assessments Collected and paid into various funds	$2,967,998 21
Water Supply Funds	39,057 04
Dock Fund	42,163 76
Excise Licenses	1,780,470 00
Public School Library Fund	53,942 73
Public School Teachers' Retiring Fund	24,700 91
Williamsbridge Sewer Fund	176,951 62
Restoring and Repairing Street Funds	128,597 93
Street Encumbrances—Dept. of Street Cleaning	21,372 78
Theatrical and Concert License Fund	38,818 00
Annexed Territory Funds	58,193 03
Dep't of Buildings Special Fund	8,435 39
Appropriated to Fund for Street and Park Openings	200,000 00
Premiums on Stocks and Small Items	75,758 10
	$5,616,459 49

LOANS, 1895.

Docks	$1,190,000 00
Public Bld'gs	2,766,909 15
Bridges	1,113,463 77
Parks	3,540,349 80
Repairing	1,001,808 06
Extension of Water Supply	2,032,500 00
Misc	1,850,297 86
Assessment Bonds	1,457,887 62
Revenue Bonds	22,184,210 78
Total Bonds Issued	37,136,426 54
Bonds of Annexed Territory	175,000 00
	$37,311,426 54

SUMMARY OF ORDINARY EXPENDITURES, 1895.

For State Taxes		$3,554,319 24
For Expenses of the City Government—		
Interest on the City Debt	$5,087,460 64	
Redemption of the City Debt	2,001,143 31	
The Mayoralty	26,622 61	
The Common Council	88,197 05	
Finance Department	312,678 96	
Law Department	228,108 86	
Department of Public Works	2,845,773 93	
Department of Public Parks	1,148,020 18	
Department of Street Improvements—Twenty-third and Twenty-fourth Wards	421,737 85	
Department of Public Charities and Correction	2,455,713 26	
Health Department	447,482 04	
Police Department	5,883,284 89	
Department of Street Cleaning	2,467,473 40	
Fire Department	2,144,245 46	
Department of Buildings	192,856 64	
Board of Education	4,760,509 14	
College of the City of New York	150,440 52	
Normal College of the City of New York	139,729 24	
Department of Taxes and Assessments	145,595 86	
The Judiciary	1,547,917 37	
Printing, Stationery and Blank Books	965,861 55	
Municipal Service Examining Boards	24,527 12	
The Coroners	53,282 52	
The Sheriff	130,613 43	
The Register	130,235 23	
The Commissioners of Accounts	63,282 90	
Bureau of Elections	656,778 10	
Judgments	124,932 87	
Asylums, Reformatories and Charitable Institutions	1,314,654 49	
Miscellaneous	740,639 74	
		$35,949,798 66
Total		$39,504,117 90

EXPENDITURES FROM SPECIAL AND TRUST ACCOUNTS, 1895.

Water Supply	$1,808,264 98
Parks and Streets	8,470,896 31
Armories	288,592 93
Bridges	965,918 09
Public Buildings	687,273 81
Museums	311,230 20
Docks	1,061,697 27
Repairing	602,096 87
Excise Fund	842,872 64
Theatres and Concert Licenses, etc.	32,775 00
Redemption of Assessment Bonds	700,000 00
Police Pension Fund	150,000 00
Fire Dept. Relief Fund	76,179 00
Public School Teachers' Retirement Fund	12,633 34
School House Fund	1,094,781 59
Revenue Bonds	20,668,244 70
Taxes and Assessments paid in error	119,711 04
Sundries and Last Year's Warrants	1,275,811 28
	$39,178,928 50

RECAPITULATION OF RECEIPTS AND EXPENDITURES

CITY TREASURY, 1895.

RECEIPTS.

Taxes for 1895	$34,417,347 51	
Arrears	2,292,897 59	$36,710,245 10
General Fund		1,933,764 82
Special and Trust Accounts		5,616,459 49
Loans, Revenue Bonds	$22,184,210 78	
Assessment Bonds	1,457,387 62	
Other Bonds	13,494,528 14	
		$37,136,426 54
Total receipts		$81,396,895 95

EXPENDITURES.

Ordinary Expenditures	$39,504,117 90
Expenditures from Special and Trust Accounts	39,178,928 50
Total Expenditures	$78,683,046 40

The operations of the Sinking Fund are excluded from this table. The Revenue paid into the General Fund and the Sinking Fund, that is to say the city's income from its properties,—aggregates about $10,000,000.

BOOK REVIEWS.

Municipal Problems. By Frank J. Goodnow, A. M., LL. D. 12mo., pp. 333. New York: The Macmillan Co., $1.50.

The problems of government naturally fall into two classes—those relating to functions, and those relating to the organization of governmental machinery. The functions of government are determined in various countries and localities and at various times by the particular conditions of time and place, and by the sociological and economic theories of the sovereign body. It is the problems of organization that demand the particular attention of both the professor and the practitioner of politics and public law. If we approach *local* government as a special field of inquiry, it becomes evident at once that the problems of organization subdivide into two classes—the problems of central control, which have to do with the relations between the local and the general or state governments; and the problems of the internal organization of the local government itself. Organization is first and always the fixing of responsibility. It has been the peculiar task of the American people to experiment with a great many forms of local organization, always, of course, within the limits prescribed by the Federal Constitution. Change and experimentation have gone on with almost feverish rapidity in the framing of city charters. It is only recently, however, that Americans, in their efforts to fix political responsibility, have begun to recognize the importance of the problems of central control. They have tried to solve the problems of city government without having determined just what place the city has or should have in the general system of government.

Prof. Frank J. Goodnow of Columbia University is easily the highest American authority in the domain of administrative law. It is natural, therefore, that he should have been the first among writers upon the problems of American municipal administration to persistently call attention to the legal position of the city in its relation to the state. To Prof. Goodnow as a student and teacher of general administration it has seemed that the problem of central control is the fundamental problem, and that the problems of municipal functions and of the internal municipal organization are comparatively unimportant, while the relation of the city to the state remains uncertain or fundamentally wrong. It has seemed wise to our author, however, to proceed slowly in the advocacy of specific reforms. In his great work on *Comparative Administrative Law*, he embodied a description at some length of the administrative control exercised by the central authorities over the municipal governments in France, Prussia and England. This work was followed two years ago by a little volume entitled *Municipal Home Rule*, in which the author attempted to delimit a sphere of distinctly municipal activity from the standpoint of legal theory and practice. Finally, in March, 1897, Prof. Goodnow published *Municipal Problems*, which is the subject of this review. In this, his latest work, the author has finally made a definite proposition for the betterment of our system of city government. This proposition contains four principal points. First, those activities of municipal government which interest the people of the locality primarily are to be carefully distinguished from those which affect both the city and the state at large. Second, the functions included in the former group are to be given over to the control of the

local authorities by a general grant of power. Third, the functions included in the latter group are to be performed by the local authorities under central administrative control to be established as a permanent feature of our commonwealth governments. Fourth, in order to prevent as far as possible the interference of state and national politics in municipal affairs, the state administration should exercise directly those functions in which the city as such has no peculiar interest.

In his first chapter, Prof. Goodnow sketches the "History of Municipal Organization in the United States." Having started out with all of the municipal functions vested in the city council under our historic system of local self-government, our cities have in the first place gradually lost their powers of home rule through the constant interference of the state legislatures. Municipal councils have been stripped of their powers. But this does not mean that we have abandoned the council system of government. "Municipal legislative functions are discharged now as they were before by a council, but that council is no longer a local council, with any sense of responsibility to the people of the city, but a central council, the legislature, elected by the people of the state as a whole." A "second fact to be noted is the establishment of municipal executive departments independent of the council, and for a time quite universally, and even now commonly, independent of any municipal authority." Of late years there has been some attempt to concentrate executive responsibility in the hands of the mayor. But "municipal home rule and local authority are as difficult of attainment under a concentrated system as under the loosely organized board system of former years, so long as the legislature treats municipal administration as a part of state administration." Our attention has heretofore been devoted almost exclusively to the problem of internal organization. Many experiments have been made, most of them in imitation of the forms of federal and state governments without any reference to the real demands of municipal conditions. "We have no generally accepted theory of municipal government," and this lack "is due, it is believed, to the fact that we have not in this country assigned the proper place to the city in our governmental system."

In his second chapter, Prof. Goodnow discusses "The Position of the City." We learn that "the American city, at the present time, is in all but a very few respects, like the country and the town, a mere administrative circumscription of the state." This is a one-sided development. To make the city a "business corporation" would be as much one-sided in the opposite direction. Properly the city occupies a double position. "It is always a public, *i. e.*, a governmental corporation. It is, however, primarily an organ for local government—for the satisfaction of local needs. It may be, and often is, secondarily, an agent of state government. The two functions which the city discharges should further be kept distinct the one from the other." The position of the city as an agent of the state necessitates a state control to the extent of that agency. In America, where almost all of the general functions of government are performed through the local authorities, the sphere of central control must be large. Most of our trouble has arisen from the failure of the legislatures to recognize the double position of the city and to abstain from interference in purely municipal affairs.

But what is the sphere of distinctively municipal affairs? How are the two positions of the city to be accurately distinguished? This question is answered by Prof. Goodnow in his third chapter. After showing that the system of enumerating municipal powers in the law as practised in England, and more especially in the United States, is much less favorable to home rule and much more conducive to special legislation and the evils of legislative interference than is the system of a general grant of power as practised on the continent of Europe, our author proceeds to the definite question regarding the delimitation of the "sphere of municipal home rule." He says: "A

consideration of the general law of municipal corporations will, it is believed, lead to the conclusion that the safest guide in the determination of the competence of cities is to be found in the attitude of the courts relative to the liability of municipal corporations for torts; for nowhere in this branch of the law is the distinction more clearly made between the public and the local functions of cities. As to this matter, the courts have held that the sphere of local action is to be found merely in the action of the city in undertaking and maintaining public works, such as water-works, streets, bridges, sewers, etc., from whose management either pecuniary gain or peculiarly local advantage is to be derived." Where cities are acting in these directions the rules of the private law are applied to them. "Where they are acting in other directions, as for example, in preserving the peace, caring for the public health and safety, either through the adoption or enforcement of local police ordinances, supporting the poor, educating the ignorant, or collecting revenue either for the use of the state or for their own use, the courts, on the other hand, consider cities as agents of the state government and subject to the rules of the public rather than the private law." But fortunately this distinction between the coporate and the governmental functions of cities is supported also by European practice. "The agreement the world over on this matter is so marked that one can hardly refrain from feeling that a constitutional provision protecting the sphere of municipal activity as above described would be effectual."

In the chapter on "The Relation of the City to the State," the method of central control over cities in the exercise of their *governmental* functions are discussed. It is shown that the American system of legislative control necessarily involving much local and special legislation has been thoroughly discredited by experience. But American experience also teaches "that in order to do away with special legislation, provision must be made for the exercise of the central control over cities which we have seen is necessary, by some authority other than the legislature." This other authority may be the courts to a limited extent, but reason and the experience of the world point to the necessity of giving a large part of this control into the hands of the central administration. The American prejudice against centralization is met by the significant statement that "there is now, and always has been, a central control over cities. It has been legislative; the plan proposed merely changes its character. It makes it administrative, but it makes it no more central than it has always been." Indeed, central administrative control, as practised in Europe involves "a larger measure of home rule" than is under the American system accorded to cities.

In the four chapters already treated we get the essence of Prof. Goodnow's book. In the succeeding chapters, which make up more than two-thirds of the whole, the conclusions already arrived at are supported and explained by a discussion of central administrative control on the continent and in England; then the problems of internal organization are treated under the headings, "Universal Suffrage," "Municipal Government and the National Political Parties," "The City Council." "The City Executive," and "The Metropolitan City." Although this part of the book is extremely interesting and valuable from a general standpoint, the most important addition here made to the general plan formulated in the first part of the work is found in connection with the author's discussion of national political parties. Although he frankly admits that there is no prospect of the complete separation of national politics from municipal government, he suggests that the attractions offered by the city to the national political parties may be diminished by the separation of general and municipal elections, by the destruction of the spoils system, by the decrease in the number of elective offices in cities, and *by the diminution of the present sphere of the city as the agent of the state.* Here we have the proposition, not to put the local administration under central control

as regards certain functions, but to take them away altogether and to entrust them to the central administrative authorities. The functions thus to be transferred are those in which the localities have no peculiar interest. As far as internal municipal organization is concerned, our author favors the distribution of powers between an elected city council and the executive department with the mayor at its head, in about the same way that this distribution is made in France and Germany. The system of permanent professional officers working in co-operation with unpaid public-spirited citizens is favored in order to insure an administration both efficient and popular.

All in all *Municipal Problems* is a notable book. It is the product of wide learning, careful investigation, and acute thinking. Prof. Goodnow has undoubtedly grasped the fundamental problem of American city government. He has proposed a solution, and has supported it with powerful arguments. It should be frankly admitted, however, that his proposition means the abandonment of our *traditional* ideas of local self-government. It may be true that the change proposed would bring no greater degree of centralization than we now have, but, as the author affirms, it would change the kind of centralization. And a very plausible case could be made out for the claim that Americans are not so much opposed to centralization in and of itself as they are to that particular kind of centralization which is regarded as characteristic of continental governments, and which Prof. Goodnow proposes to introduce into our American system.

NEW YORK CITY. DELOS F. WILCOX.

The Street Railway System of Philadelphia: Its History and Present Condition. By Frederick W. Speirs, Ph. D., Johns Hopkins University Studies 15th Series, Nos. III, IV and V. Baltimore, Johns Hopkins Press 1897. 128 pages, Price $1.00.

For the first time we are given an adequate monographic treatment of the relation of the municipality to the street railway service. It is a matter of general congratulation that the standard has been set by a monograph which gives evidence of that judicial temperament and careful critical spirit so necessary to the treatment of this subject The author has no thesis to prove; no abuses to rail against, no general panacea to offer. The development of the street railway system of Philadelphia and the history of the various companies are carefully examined. The skilful combination and co-ordination of facts carries its own lessons with far greater force than any amount of argumentation.

As compared with the other cities of the United States, Philadelphia has shown a far clearer appreciation of the value of the franchise privileges granted. The earliest charters imposed upon the companies the obligation "(1) to pave, repave and repair the streets which they occupy, (2) to pay to the city a tax of six per centum on annual dividends in excess of 6 per cent. and (3) to pay a license fee for each car to be run." It was here that the weakness of the city government and the power of the corporations over the city showed itself most clearly. The first of the obligations was almost entirely neglected until within comparatively recent years, the second inadequately enforced. The license fee remained for a long time the only real compensation for privileges granted. During the period of 1857–1890 opportunities were neglected which have been forever lost. Had the city authorities been alive to the public interest much might have been done. With a City Council willing to close its eyes to the neglect of corporate obligations and a State Legislature dominated by corporate influence, it is not surprising that the companies were able to escape payments and ignore services due to the city. The introduction of the electric trolley system in 1892 caused an awakening of public opinion. The strict enforcement of all contractual obligations was demanded as well as an adequate return for the new privileges. The local legislature was unable to resist the pressure. The repaving of all streets occupied by Street Railway Com-

panies "with Belgian blocks or other improved pavement, as directed by ordinance of Councils or by the Director of the Department of Public Works" was inserted as a condition of the grant. As a result the companies have repaved mainly with asphaltum 271 miles of street since 1891 at an estimated cost of nine million (9,000,000) dollars. As regards the other obligations, especially that relating to the payment of percentage of dividends when such dividends exceed six percentum, it is interesting to note how the period of unregulated development has made this provision a practical dead letter. During the period 1857–1895 a gradual but steady process of consolidation of existing companies was going on. As Professor Speirs aptly remarks, "The General Assembly said 'Let there be competition,' where economic law says no real and permanent competition can exist." With thirty-nine companies in 1874, but two remain in 1897, one of which controls 406 out of a total of 480 miles of street railways. In the consolidation of the companies the future value of the franchises was capitalized and the stockholders of the original companies guaranteed dividends under the name of "rentals" on the basis of such valuation. The result has been an enormous over-capitalization. High dividends on the capital of the consolidated company have become impossible—at all events in the immediate future. At the same time the stockholders in the original companies are receiving from 16 to 65 per cent. on the paid in capital stock, dividends which according to the terms of consolidation are to increase with each year. The various stages in this process are admirably described by the author in chapters III, IV and V. In chapters VI and VII the questions of public control and municipal ownership are discussed; the experience of European cities being examined with great care.

In this brief notice, but a faint idea can be given of the value of the material presented by the author. As a whole, the work represents one of the most valuable contributions to the study of the municipal problem which we have had within recent years. It may well serve as a model for a series of monographic studies of the same question as it presents itself in the large cities of the United States.

L. S. Rowe.

University of Pennsylvania.

Public Baths and Public Comfort Stations. Report by the Mayor's Commitee of New York City, William Gaston Hamilton, Moreau Morris and William Howe Tolman. 8vo. pp. 195, indexed. New York, Published by the Committee, 1897. Cloth, $1.00; paper, 75c.

In April, 1895, the New York Legislature passed a law making the provision of public baths open all the year round, compulsory in cities of the first class, but there is no public bath in New York, although Buffalo opened a well-appointed bath-house on New Year's Day, 1897 A site has been granted—part of the new park on the East side—but when that site will be cleared and building commenced, is not known.

Following the election of 1894, the Committee of Seventy appointed various subcommittees on municipal affairs, one of which undertook to investigate and report on the subject of Baths and Comfort Stations. Their preliminary report was issued early in 1895, and they continued their studies until the disbandment of the Committee of Seventy. Then, feeling that the information they hoped to give the public was too valuable to be lost, they reported to the Mayor, who appointed them as his advisory committee on the subject. The results of the two years' research are now presented to the public in a report of 200 pages.

The gentlemen signing this report are Mr. William Gaston Hamilton, C. E., Chairman of the Committee; Moreau Morris, M. D., Vice-Chairman, and William Howe

Tolman, Ph. D., Secretary. Their fitness for the work follows from the study they have given to the subject for many years and they have succeeded in collecting a vast amount of interesting matter which should assist all in other cities who are planning to build public baths. This information has been placed at the disposal of gentlemen visiting this city, who have gained many ideas from it and from looking over the People's Baths.

The Committee pleads the cause of Public Baths with the wealthy. "In these days when wealth is abounding on every hand, and men and women are desirous of leaving a worthy memorial, what larger social service could be rendered than the erection and equipment of a public bath? If such a benefaction was honored in the days of Rome, surely there are merchant princes in our American cities whose public spirit will make possible a monument to the lasting honor of their own municipality."

The greater part of the study of baths contained in this report deals with English and Continental cities, for the municipal bath is only of recent institution in this country. Chicago has maintained a small bath since 1893; Yonkers opened one on Labor Day last, and Buffalo and Brookline opened theirs New Year's Day. In England and Germany it is different. Almost every city of more than 50,000, and many with a considerably less population, have public baths, while London has baths in the majority of its parishes, Islington alone maintaining three handsome establishments, which cost nearly $500,000, all of which have been raised by loans since 1889. The charges at these baths vary from two cents for school children to twelve cents for a first-class private or swimming bath for an adult. In no case are the baths free, except in London, on the production of a special certificate for a swimming bath by elementary school children, the School Board redeeming these at a fixed rate. It is felt that the art of swimming is so useful as to warrant this expenditure, and teachers have assisted by forming an association to teach the children swimming gratuitously. Thus these city-bred youngsters are in some measure compensated for the lack of that recreation which the country boy has close at hand, and how ready they are to take advantage of their opportunities in this respect the attendance at the London baths shows. That New York boys and girls would not be behind them is proven by the attendance at the river baths.

While in England the first legislation dates from 1846, New York was only three years behind in introducing a bill to incorporate a bathing and washing association, but whereas the English bath movement went steadily forward, with the assistance given by the taxes, the philanthropic movement here fell through for lack of support, and it was not until 1891, when the People's Baths were built, that there was any real movement for the establishment of public baths, supplying hot and cold water and open all the year round.

The Tenement House Commission of 1894 revealed the fact that out of a population of 255,083 covered by the committee's inspection, only 306 had access to bathrooms in the houses in which they lived. It is this section of the city for which the Mayor's Committee has endeavored to obtain a public bath, and it is sincerely to be desired that the movement will now be pushed forward with all possible vigor.

The public washhouse as an adjunct to the bath is highly commended by the Committee, and the lesson is further pointed by two illustrations of the one room of a poor family on washing day.

The section of the report dealing with public comfort stations calls attention to the disgraceful lack of these conveniences in this city. President Roosevelt and Commissioner Andrews state that this is a common excuse of a policeman entering a saloon while on duty, and the same holds true of the street sweepers and letter carriers. An

attempt last winter to give a monopoly of the supply of such conveniences to a private corporation failed. The Legislature has provided sufficient funds to erect at least two Underground Comfort Stations, one of which it was proposed to place in City Hall Park and one in Greeley Square.

Plans for two sets of baths, and for several kinds of public conveniences are presented in the report. The baths advocated are the spray baths, such as are in use in the People's Baths. Both on hygienic and economical reasons, this form of bath is far preferable to the ordinary tub.

The illustrations of English baths, as well as of the fine new bath of Brookline, may serve as an example of what has been done. How far we should imitate these may be an open question, but of the crying need of some form of bath, and especially of cleansing baths, in the densely crowded districts there can be no doubt. The report of the committee is a mine of information that will be of immense utility to the officials and people of progressive American cities. It will serve to give concreteness to the already well defined popular demand for municipal conveniences. A good index, a carefully prepared bibliography of the subject and a profusion of illustrations and diagrams add materially to its value.

LEADING ARTICLES ON MUNICIPAL ADMINISTRATION AND CITY CONDITIONS.

(Note.—The preceding number of MUNICIPAL AFFAIRS was entirely devoted to a Bibliography of Municipal Administration and City Conditions, which was, so far as possible, brought up to the first of the present year. In the following pages digests and reviews of the leading articles on this general subject which have appeared during the succeeding six months (January–June, 1897) are presented. Each of the future numbers of MUNICIPAL AFFAIRS will contain under this heading reviews, notes and comment upon the best periodical literature of the preceding quarter on the government of cities and related topics.)

CHICAGO AND ITS ADMINISTRATION.

The Hon. Lyman J. Gage contributes an article to *The Open Court* for April entitled "Chicago and its Administration." The article consists of a collection of statistics taken mainly from the census of 1890, and a general outline of the government of Chicago. Parts of the statistical information relating to the nationalities, the occupations, and the religious divisions of the population, are very instructive. The number of street lamps, the miles of sidewalk, the number of drug stores, bakeries and butcher shops, and much more of the same kind of information might profitably have been omitted to make room for some information about the schools, the libraries, the art galleries, and the housing of the people.

Mr. Gage describes the government of the city of Chicago and its workings very concisely and satisfactorily. Virtually all the powers of the city government proper are vested in a Mayor and Aldermen, elected by the citizens for terms of two years. The Mayor has a casting vote when the Aldermen are equally divided, and also has the power of veto which cannot be overridden except by a two-thirds vote. The State statute confers more than ninety enumerated powers upon the City Council which Mr. Gage sums up as "the making of rules for the conduct of the executive officers of the city government so far as it is practicable to regulate it by general rules laid down beforehand, also for the conduct of individual citizens in their relations to each other, whether in business or recreation, in matters where State law does not interfere. These powers also extend to providing against certain common dangers, such as fire, and to some extent supplying certain individual wants to which all are subject, such as water, roads, and lights." Each ward is represented by two aldermen, elected one each year to serve for two years.

The Mayor, in whom the executive powers of the city government are virtually concentrated, appoints the heads of departments subject to confirmation by the City Council. As a general rule the heads of departments appoint, with the consent of the Mayor, the chiefs of the several bureaus in that department, and the chief of each bureau appoints and removes his own subordinates with the consent of the head of the department. The Department of Public Works has charge of the water works, the collecting of water rates, the sewers, the grading, paving, lighting, and keeping in order and repair of the streets. The Department of Health has full power "to do all acts and make all regulations which may be necessary or expedient for the

promotion of health or the suppression of disease." Formerly the removal of garbage, ashes and other rubbish was under the charge of the Department of Health, but in 1893 this work was transferred to a newly created Street Cleaning Bureau, which has an inspector in every ward to see that the contractor does his duty.

The Department of Police and the Fire Department both appear to do their work efficiently and honestly. Mr. Gage, commenting upon the general aspects of municipal administration in Chicago, says: — "It would seem on the whole, that if the city government of Chicago does not work as it ought to, the cause is, to a very slight degree, in the system and practically altogether in the men who administer it."

THE SALOON QUESTION IN CHICAGO.

The *American Economic Association* publishes in its issue for April a short essay by John E. George of Northwestern University on "The Saloon Question in Chicago," which might well serve as the forerunner of a series of scientific studies of the liquor problem to be made by our universities. The annual drink bill of Chicago is estimated at $70,000,000.00; of this sum $34,000,000.00 is paid for beer, which cost at wholesale $15,000,000.00 The city receives from licenses at $500 each, $3,855,000. Brewing companies are on 75% of the bonds for licenses, and advance one-third of the money. They also own saloon rights and property and establish agents in cheaply furnished saloons in order to increase their sales. One brewery has 350 saloons retailing its beer exclusively. The political influence of the saloon in Chicago is described by Mr. George as follows:

"The saloon is in politics in Chicago, as it is in every large city; yet it is difficult to determine just to what extent it is a factor. If we take the dealers at their word, however, we may conclude that they are united in promoting their own interests in so far as those interests can be promoted through political influence. The Liquor Dealers and Manufacturers' State Protective Association of Illinois, of which there are fourteen local associations in Chicago, with a membership of about two thousand, distinctly states in its constitution that it is the duty of local associations 'to oppose all attempts at maliciously perverting so-called temperance laws and ordinances; to use all honorable means to have only such men elected to public office (irrespective of politics) as are favorable to the aims of this association.' It further states that 'it shall be the duty of the district association * * * to carefully watch the state and judicial elections within the district and to aid in the election to office of those persons who are willing to grant the same privileges to those engaged in the liquor trade as are enjoyed by others.' Still further, 'it shall be the duty of this association to watch after the interests of the liquor dealers in this state; to use its influence in preventing oppressive laws from disgracing the statute books of the state.'

When the large sums invested in saloon fixtures and expended in rents and license, and the great profits from the sale of liquor are taken into account, it will be seen that the saloons are a great factor financially, and are therefore in a position to make themselves felt politically and to claim a right to be represented in public offices. When it is further considered that there are to-day more than 6,500 saloons in Chicago whose interests are the same, and that in each saloon there are at least three persons, the proprietor and two assistants, whose interest it is to maintain the liquor business, it may be seen how great, numerically considered, is the saloon representation in politics."

CIVIC PROBLEMS OF GREATER CLEVELAND.

"A Few Civic Problems of Greater Cleveland" is the title of a neat pamphlet of forty pages by Mr. C. E. Bolton of that city. Whatever opinion may be held in regard to the writer's sanguine predictions of the future greatness of Cleveland, his underlying idea, viz., that the future of a city is in the hands of its citizens, is one that might well be impressed upon all city dwellers. Mr. Bolton presents very definite and careful proposals on the following topics: I. An Extensive Dock System, II. A New Union Railway Station, III. Some Suggestions on Sewage Disposal, IV. A Cleveland Court of Honor, and V. The Mediterranean and Great Lakes Compared. The many valuable illustrations drawn from the contemporary experience of great European and American cities make this little pamphlet of interest to others besides the citizens of Cleveland to whom it is primarily addressed.

THE DEVELOPMENT OF AMERICAN CITIES.

The March number of the *Arena* contains the first of a series of articles to be contributed by the mayors of our large municipalities on the general subject of desirable municipal reforms. The writer, the Hon. Josiah Quincy of Boston, discusses "The Development of American Cities," and certain of their problems. Mayor Quincy notes that while the suffrage in European cities is greatly limited, their administration of city affairs is conducted upon much broader and more popular lines than in America. This difference in the location of political power is not sufficient, in his opinion, to warrant us in disregarding the experience of foreign cities,—on the contrary, "the presumption should certainly be that the people of New York are capable of organizing any branch of public service which the city of Berlin finds it for the interest of its people to undertake."

The principles of successful administration, in Mayor Quincy's opinion, require first of all, a strong executive head. As a large part of municipal work is of a purely technical character, a second requisite is a regular and capable professional force maintained upon a permanent basis and independent of political changes. Such a force may be secured even under the party system of government by maintaining a dual organization, one political and one technical. In the latter department the rule that only the best talent is good enough for the city should be rigidly adhered to.

Municipal ownership, in Mayor Quincy's opinion, is purely a commercial question in each particular case. Civil service is not a necessary preliminary to an extension of municipal functions,—"we should be willing to trust something to the educating and awakening effect of imposing further responsibilities upon a municipal government and thus bringing it into a new and close relation with the citizens." Municipal Ownership does not necessarily involve municipal operation. In some cases it may be advisable for a city to lease its franchises under proper terms and conditions for a term of years. Thus the operation by the city of a great and intricate electric railway system with its hundreds or even thousands of employees would be a matter of a great deal more difficulty than the operation of electric lighting plants. Mayor Quincy considers the lighting of public streets, grounds and buildings so clearly a municipal function that the only question to be considered is, what legal difficulties or other embarrassments may arise in terminating existing relations with private companies.

American cities are far behind their European prototypes in supplying what may be called municipal conveniences or privileges,—libraries, higher education, parks, play-

grounds, public baths, gymnasia, etc. Mayor Quincy makes a strong plea for greater activity along this line. Sound economy justifies large expenditures for such purposes as increasing the working efficiency of the population, and a true consideration for social welfare urges it more strongly still.

E PROBLEM OF MUNICIPAL REFORM. CONTRACT BY REFERENDUM.

Hon. Hazen S. Pingree of Michigan contributes the second of a series of articles on Municipal Reform to the *Arena* for April. The former mayor of Detroit apparently has little sympathy for that kind of reform which consists in the criticism of real reform work undertaken by others. The chief source of municipal corruption is in the granting of contracts. No system seems capable of making corruption impossible, of providing checks that will last for all time. Municipal ownership however will "provide the minimum of contracts of importance, and there is no reason why a city should not do all public work, like paving and sewer construction, etc., by the day." All contracts of importance should be referred to the ballot for confirmation. Gov. Pingree also believes that the application of the Swiss referendum to municipalities would effectually wipe out party lines in cities. He takes occasion to criticise the recent action of the union of street-car employees in Detroit which, in the face of a consolidation of three street railway companies, asked for an increase of fares on the ground that otherwise the current rate of wages could not be maintained.

THE CITIZEN AND HIS CITY: THE CITY AND ITS CITIZEN.

The third of the *Arena's* series of articles on city government is contributed by the Hon. John Boyd Thacher of Albany, who divides the municipal problem into two parts, first the relation of the citizen to his city and second the relation of the city to its citizen. Mayor Thacher censures the indifference and carelessness of the average "good citizen" which are not only immediately responsible for much bad government but are also taken into account in the formation of constitutions and charters. The Greater New York Charter is cited as a case in point: "Probably no municipal instrument has ever been framed with such care and study as the proposed Charter for Greater New York. Yet it is apparent that its aim has been to relieve the citizen of care and responsibility in the city government, except by inviting his attention once in four years when a Mayor is to be chosen. It proposes to restrict executive powers by the employment of an impersonal police commission and of individual heads of departments who are deprived of control over subordinates. A single-headed commission appointed by a Mayor (himself elected every one or two years) and removable at any time by the Mayor means unusual watchfulness on the part of the citizen. Unremitting watchfulness on the part of the citizen means constant agitation and frequent annoyance."

In discussing the relation of the city to its citizens, Mayor Thacher lays down the rule, *The city shall do nothing for the individual which the individual can do for himself*, which he applies to all the functions exercised or proposed to be exercised by city government Private philanthropy should be depended upon to supply municipal luxuries and not the city or the state. "In other lands, where the state does everything for the individual, the public dedication of private fortunes is not common. Now and then in a European city an Althorp library or a Borghese Gallery is given to the public,

but the instances attract attention from the unexpected diversion of the fortunes to public service. In America the gathering of a fortune has been largely with a view to the establishment for the public of beneficent charitable and higher educational institutions. This sense of public obligation has been very strong in this country, and it has reconciled the unambitious man to the grasping hands of his accumulating brother."

Mayor Thacher criticises the municipal activities of Glasgow as follows: "In Glasgow the municipality is a landlord. It not only enters into competition with other landlords, but like any giant of monopolistic tendencies, it drives other landlords out of business. Some of the cheap lodging houses were immoral. There was a large population of men without families who had to be provided with cheap accommodations. To purify the character of the immoral lodging houses—a police duty, by the by—and to preserve cheap homes for its poorer bachelor citizens, the city of Glasgow erected comfortable houses where a good room and bed, light, heat, and the privilege of a cooking stove were furnished at a cost per night of from seven to nine cents in our money, according to accommodations. In that same city and in other cities on the continent, the municipality is engaged in the laundry business. The city owns tubs, steam machinery, mangles and ironers, and conducts in several districts a general laundry trade, not merely competing, but actually establishing by its municipal wash lists the price and charges of that particular business enterprise. The thoughtless philanthropist cries, 'Splendid!' Yes, splendid but not the proper employment for government. The same philanthropist applauds the municipal lodging house plan. He does not consider that these cheap, comfortable, convenient rooms are keeping men in an unmarried, and therefore in an unnatural, state, and further, that where thousands of men are maintained happily on fifteen or twenty cents per day—this sum includes lodging and breakfast and supper—one of two things must come to pass: either this vast army of bachelor laborers will compete with and drive out of the labor market another vast army of married laborers who enjoy none of these cheap comforts, or else this vast army of bachelor laborers will work but one day in the week at the sustained and regular rate of pay, thus earning enough to keep themselves in idleness and at possible mischief the remaining six days. The philanthropist is a blessed being, and we owe to him most of the amelioration of the race, but his mission is to soften and leaven government and not to fashion it."

DIRECT EMPLOYMENT OF LABOR vs. THE CONTRACT SYSTEM.

Mr. Ethelbert Stewart in the November (1896) issue of the *Bulletin of the Department of Labor* opened a discussion on the direct employment of labor by municipalities as compared with the contract system that has since been continued in a number of magazines and has attracted considerable public attention. The two systems are compared in the cities of Baltimore, Boston, New York and Philadelphia as to wages paid, first, to those engaged on public work employed directly by the city or state, second, to those engaged on public work employed by contractors, and third, to those engaged on private work employed by contractors or firms. Mr. Stewart finds that the highest rates of wages paid to unskilled labor are paid to those employed directly by the municipality or state. Generally speaking, this is true also of the skilled trades. This does not necessarily mean that the city is obliged to pay more for the same amount and kind of work under the system of direct employment. Under the other system the cost of inspection, which is enormous for cities, must be added to the contract price before it can be determined whether or not the contract figure is a low one. Street sprinkling in

the city of Boston was done by the contract system in 1894 at a cost of $11,824.52; in 1895 the same work was done by directly employed day labor at a cost of $7,530.00, resulting in a total saving to the city of $4,294.52. The rate of wages paid by the city to the men who actually did the street sprinkling was considerably higher than the wages paid by the contractors. The accusation is frequently brought against the contract system that it tends to break down standard rates of wages. Mr. Stewart concludes from his investigation, however, that this effect is largely confined to unskilled and unorganized labor, and that the trades are but slowly and slightly affected.

Prof. John R. Commons continues the discussion in the February number of the *Yale Review*, describing the Works Department of the London County Council, the Delganey Sewer of Denver, paving in Toronto and a number of other public works constructed by directly employed labor in American cities. Prof. Commons finds that "The almost universal testimony gathered from different sources, of those entitled to speak, is that whatever may be said of the cost and of politics, the quality of work done by the municipality on the day labor plan is better than when done by contract." Three factors which may enter to make the cost of direct city work higher than that of contract work—namely, fancy wages, poor relief and politics, must be guarded against. "In England public works have sometimes been constructed by aged and incompetent paupers taken from the almshouses. In Massachusetts and New York the civil service law gives preference to veterans of the late war. While the state should provide for its poor and patriots, it should do so openly, and not use them to jeopardize the efficiency of the civil service. The day labor system must be judged on its merits, and not be loaded with paupers and pensioners. Its success depends on the power to discharge employees for inefficiency."

The saving of the heavy cost of inspection and of the profits of contractors and subcontractors must be counted in favor of direct employment. "In addition to saving the legitimate profits of contractors, the city is able to overcome the combinations and exorbitant demands which they frequently maintain, provided it is in a position to do the work itself. The city surveyor of Montreal stated that 'the contractors combined and ran sewer work up to $15.00 per linear yard for a 8' by 2' brick sewer. I instituted day work, and brought prices down to $6.00 per linear yard. Paving hard rock and concrete went up to $4.25 per square yard; did day work for one year, and brought prices down to $3.80 per square yard.' The Mayor of Buffalo complains that the city pays three dollars per square yard for asphalt paving, while street railway companies are offered the same thing for $2.40 per square yard. It was revelations of this kind that finally defeated the contract system in the London County Council."

The preference for home labor and regularity of employment under the system of direct employment are advantages that appeal strongly to working men. "In municipal employment, where profits are not immediately concerned, but permanency and good quality of work, the higher standards of workmanship produce a greater pride and interest on the part of laborers in the work they are doing. The reaction upon their own character of this high-grade work and the honorable treatment they receive, shows itself in their improved honesty and dignity. Wages are fixed by a fair standard, and those not coming up to the standard are dropped, instead of wages being fixed by the necessities of the more shiftless, dependent and ignorant class of laborers. Honest work makes honest men, just as honest men make honest work."

In conclusion Prof. Commons urges strongly the necessity of civil service reform "which is a necessary accompaniment, not only of this, but also of every other munici-

pal reform. Without it no one but professional politicians can seriously advocate the day labor system."

The *American Federationist* is also running a series of articles on direct employment by Prof. Commons which are attracting considerable attention in labor circles.

Under the title, "Public Work Directly Performed," Sylvester Baxter contributes a very suggestive article to the April *Review of Reviews*. Mr. Baxter makes the point clear that under the contract system the contractor will surely be in politics for the benefit of his pocketbook, while under the system of direct employment the laborers will just as surely be in politics for the improvement of the conditions of their employment. A universal eight-hour day for public employees does not seem entirely unobjectionable owing to differences in arduousness of the many kinds of work. In some branches six hours or even five might be more exhausting than nine hours would be in others.

The Co-operative Contract System in vogue in New Zealand is described by Mr. Baxter as follows: "Public work is divided into small sections by the engineer in charge, and an estimate is made of its cost. Each section is then let out to a group of workmen, who do the work under a foreman of their own choosing, but who receives no more than his fellows. They obtain the full profit which would otherwise go to professional contractors, and they share in the payment equally. Each worker is interested in seeing that his companions do their full amount of work and the sooner the job is performed the greater the return for a day's work. If any tools are needed which the men do not own, the government supplies them at a moderate rental. The adoption of this system should provide a method whereby direct employment by the government would be consistent with a full return for the money expended, giving to the community an advantage in the economical execution of public enterprises equal to that enjoyed by private employers."

Mr. Baxter proposes the introduction of a system of rewards or premiums based on certain fixed standards of excellence or speed in the performance of work somewhat similar to that so successfully employed in the building of war ships. Such a method applied to a group or gang of workers engaged on a given job or section of a job, taken as a unit, appears to possess merits above any system of reward applied to individual workers which might tend to promote jealousy, suspicion and charges of favoritism.

The progress of the principle of direct employment is illustrated by the recent purchase by the city of Boston of a municipal printing plant. In order to institute a thorough comparison between the cost of municipal and contract printing each department is to be regularly charged the price for its work that has hitherto been paid under contract. The result of this experiment will be awaited with great interest.

A "Side Light from Chicago" is thrown upon the discussion of direct employment by George E. Hooker in the same (April) number of the *Review of Reviews*. Mr. Hooker compares the contract system of street cleaning in the city of Chicago with the street cleaning done by direct labor in New York City and Toronto which enjoy the distinction of being the cleanest cities on the continent. The Chicago method is not only not cheaper when cost of inspection is considered but is notoriously inefficient. Contracts for a longer period, say for five years, might mitigate the lack of continuity that seems to be one of the chief defects of the Chicago street cleaning work, but even that device would be a mere half-way measure warranting only temporary investment on the part of the contractor. Contractors and aldermen combine to produce and continue bad government; the former furnish places for the political followers of the aldermen who in turn use their influence in awarding fat jobs to contractors. The Italian padrone flourishes and exacts fees and votes in return for employment. Cut rate wages paid by contractors in slack times swell the demands made upon the city charities in winter.

In conclusion Mr. Hooker says: "The ethical aspects of the contract system as it is in operation, are shocking enough, but its shortsightedness and its folly from the practical standpoint of municipal economy are even more glaring. Both here and in other American cities, as the people clearly appreciate its points, they are bound to require its abandonment."

CONDITION OF THE NEGRO IN VARIOUS CITIES.

The Bulletin of the Department of Labor for May contains the result of an investigation made under the direction of Mr. George G. Bradford of Boston, by representative colored men and women into the social and economic condition of negroes in various cities, including Athens, Atlanta, Macon, Savannah and Cartersville, Ga.; Birmingham and Tuskeegee, Ala.; Cambridge, Mass.; Orangeburg, S. C.; Jackson and Nashville, Tenn.; Jacksonville and Sanford, Fla.; Louisville, Ky.; Macon, Miss., and Washington, D. C. Valuable statistical tables showing size of families, relationship, ages, household conditions, occupations and earnings, death and sickness are presented with the report.

CITY HISTORY CLUB SERIES ON HISTORIC NEW YORK.

The City History Club, of which Mrs. Robert Abbe is president, is to be congratulated not only on its excellent work in forming popular classes for the study of the history of this city but also on the Half Moon Series of Monographs on Historic New York which it is now publishing. The first five numbers which have been issued monthly during the present year are as follows:

"The Stadt Huys of New Amsterdam," by Alice Morse Earle.
"King's College, now Columbia University," by John B. Pine.
"Annetje Jan's Farm," by Ruth Putnam.
"The Early History of Wall St., 1653–1789," by Oswald Garrison Villard,
"Governor's Island," by Blanche Wilder Bellamy.

Each of these clever little studies relates to some subject or locality familiar and interesting to New Yorkers. Future numbers which have been announced as follows promise to be as delightful in contents and appearance as those already issued:

"The Fourteen Miles Round," by Alfred Bishop Mason and Mary Murdoch Mason.
"The Bowery," by Edward Ringwood Hewitt and Mary Ashley Hewitt.
"The City Chest of New Amsterdam," by Dr. E. Dana Durand.
"Old Wells and Water Courses," by George E. Waring, Jr.
"Defences of Old New York," by Frederick D. Grant.
"Old Greenwich," by Elizabeth Bisland.
"Tammany Hall," by Talcott Williams.

(Brentanos, Union Square, New York. Price 5cts. each or 50cts. per year.)

THE MUNICIPAL PROBLEM AND GREATER NEW YORK.

In the *Atlantic Monthly* for June, Dr. Albert Shaw discusses the Greater New York Charter and its general relations to the municipal problem, in the same charming and lucid style that characterizes his two books on Municipal Government in Great Britain and Continental Europe. The absence in the United States of any uniform

framework of municipal government, due to the great number of sovereign states and the readiness of their legislatures to modify existing city charters or manufacture new ones, is a condition which, as Dr. Shaw points out, is strangely at variance with the usual conservatism of the Anglo Saxon as it manifests itself in our politics. In England and in each of the continental countries, simple uniform systems of city government prevail with but few local differences. Not until the era of legislative interference is ended and American cities are permitted to enjoy real home rule can we expect to attain any degree of stability in their form of government.

Dr. Shaw sketches briefly the evolution of the present governments of New York City and Brooklyn, and incidentally draws a very clever comparision between the Brooklyn idea of an autocratic mayor and the administration of a railroad by a receiver. Such an expedient may be temporarily useful in recovering from an era of mismanagement and corruption, but it does not possess the creative spirit so necessary in dealing with the rapidly changing conditions of modern municipalities. "It lacks equilibrium and cannot be regarded as a permanently wise mode of municipal government, because it does not make provision for the normal exercise, within the municipal corporation itself, of those full and complete deliberative decisions and judgments without which a town may indeed be policed and administered, but without which it cannot develop and grow on the broad lines of policy that the modern municipal corporation ought to prescribe for itself."

Consolidation, in Dr. Shaw's opinion, is both desirable and ultimately inevitable. This does not excuse the blind haste that has characterized its accomplishment. "The process should be deliberate and well-considered at every stage. It has been convincingly asserted that the union of New York and Brooklyn could not be suitably or safely consummated at a date earlier than the beginning of the year 1900 or 1901." The first task of the Greater New York Charter Commission was "the creation or revival of a representative body which should exercise, responsibly, in open session, from time to time, in the City Hall at New York, those legislative powers respecting local and municipal matters that are now actually exercised, irresponsibly or at the dictation of bosses, by the state legislature at Albany. Municipal home rule was to be the foundation stone upon which the new charter was to be constructed. The reformers were disappointed by the charter commission in their desire for a municipal parliament in a single chamber. They were disappointed in their request for long terms with partial renewal, in order to provide for continuity. And above all, they were disappointed in their expectation that the municipal assembly would be—in large part, at least—elected on a general ticket rather than from wards or districts. It is only fair to explain, however, that the districts into which the city is divided for the election of members of the upper branch are large, having an average population of nearly 350,000, while the small districts which choose aldermen have about 50,000 each. The legislative authority of the new municipal assembly is limited by grants of authority, conferred elsewhere in the new charter upon the administrative boards and heads of departments. One is obliged, therefore, to search the charter through in order to ascertain to what extent the appointive boards and heads of departments are given a power which would otherwise be exercised by the municipal assembly."

Dr. Shaw illustrates the complexity of the new charter by describing the process which it prescribes for making up the annual budget. The necessary preliminaries to building another bridge across the East River are detailed at length, and furnish another striking case in point. The short cut to Albany is made inevitable by "the complications in the charter, the system of bolts and time locks which form so amaz-

ingly ingenious a scheme. For an ideal municipal charter, or any equilibrium or stability in the structure of the municipal system as such, there are no bright prospects in the neighborhood of New York. The country must seek elsewhere if it seeks instruction in the framing of charters."

THE EDUCATIONAL SYSTEM OF GREATER NEW YORK.

Prof. Nicholas Murray Butler of Columbia University, editor of the *Educational Review*, describes in the *Independent* for March 11th, 1897, the Educational System provided for the Greater New York by its charter.

"Some idea of the difficulty of the task may be gained from the following figures: The school systems to be consolidated comprise not only those of the present cities of New York and Brooklyn, but also five school districts in Long Island City, 29 in Richmond County (Staten Island), 14 in Newtown, 8 in Flushing, 11 in Jamaica and 7 in Hempstead. In 1896, the total number of children, between five and eighteen years of age, resident in this territory was 766,847. The total number of public school teachers in 1895 was 8,428. The value of the school property is about $32,000,000, and the total expenditure in 1895 was $10,552,955.37. It must be borne in mind, too, that the schools range all the way from the magnificently equipped Boys' High School in Brooklyn, to the one-room building of an ungraded rural school on Staten Island or on Long Island.

The fundamental principles on which the educational chapter of the new charter is drawn are these: (1) A consolidated and single system of business administration for the whole of Greater New York; (2) a centralized and single system of examining and licensing principals and teachers; (3) a decentralized or Borough system of appointing teachers, fixing their compensation, determining courses of study, and generally of conducting the internal management of the schools—all subject, however, to central oversight and criticism, and all conformable at least to a centrally prescribed minimum of efficiency. The advantages of this plan of organization for a territory so extensive and for populations so varied, and so heterogeneous lie in its happy combination of rigidity and elasticity. The elasticity of the plan enables every locality or political subdivision to have schools provided that meet its real needs, and not some one's theories of what these needs ought to be. Its rigidity guarantees to every portion of Greater New York well-built, well-furnished and modern school buildings, trained and professional teachers, and a course of study that meets the minimum requirements of modern educational science."

With the exception of certain provisions relating to the borough of Brooklyn, Prof. Butler thinks the sections of the new charter relating to education mark "a genuine contribution to the science of municipal administration, and a noteworthy advance beyond conditions that now prevail so generally in the school systems of great cities."

HEALTH DEPARTMENT OF GREATER NEW YORK.

The *Sanitarian* for April contains a paper on the Health Department of the Greater New York which was prepared and read by Dr. Stephen Smith before the section on Public Health of the New York Academy of Medicine. Dr. Smith is inclined to criticise severely the provisions of the new charter relating to the Health Department as the following extract will show:

"There are three points of criticism, for the most part, that call for serious consideration. Two of these are general and one specific. The first is the anomaly presented in civil government by the creation of a department clothed with such arbitrary and unrestricted power as the Board of Health will be. As the matter stands at present, the head of that body is invested with judicial, legislative, and legal power without a higher authority. Not only does he make the laws governing property, but even persons. He employs his own officers and combines within himself all the functions exercised by a full-fledged government.

Such a state of affairs should not be tolerated unless it is absolutely essential to the public welfare, and is defensible only if the actual work can be accomplished in no other way. No precautions are taken to guard against dishonest officials, and this is all the more to be condemned as no department furnishes such opportunities for corruption and bribery as the Health Department.

The second objection to be considered is, that no provision is made for the qualifications which the officers of the department should possess, and it is of vital importance that incompetency should be guarded against. If the board is composed according to the system provided for in the charter, it will be unfit to perform its duties. The very fact that two of its members are *ex officio* is an invitation for the introduction of partisan politics, an element that should have no place in a health department.

The third objection, while specific, is none the less grievous. It is especially provided that of the three commissioners appointed two shall be physicians and one a layman, and that the layman shall be president of the board. Under no condition can a physician hold that office. Thus a lawyer, grocer, cobbler, pedlar or any tramp, just so he has no medical knowledge, is declared qualified for the position, and the only disqualification is being a physician.

In defense of this, the superannuated theory is set up that a physician has no executive or business ability; but experience has proved that this is a fallacy. The president of the National Board of Health was a physician, and the report submitted by him to Congress was declared a model of accuracy and conciseness."

As a remedy for these evils, Dr. Smith suggested that the charter be so amended as to provide for the representation of the three essential requisites, namely, medical science, sanitary engineering, and law, in the Health Department, and to that end he advocated the appointment of three physicians, one lawyer and one sanitary engineer, all of ripe experience and residents of the boroughs of Manhattan, Brooklyn, Bronx and Queens, as Commissioners, with the Health Officer of the Port and the President of the Police Department as *ex-officio* members of the board, so as to provide a restricting power, the President of the Board to be elected by the Commissioners themselves.

THE NOMINATING SYSTEM.

Mr. E. L. Godkin contributes to the April *Atlantic* a discussion of the "Nominating System in the United States" that will be read with the keenest interest by all students of our political institutions. Not the least interesting part of the article is the historical account of the evolution of the caucus, the nominating convention, and those more modern political entities, the machine and the boss. The evils of the primary, with which we are only too familiar, the voting of large numbers of persons who have no right to do so and the non-attendance of those who do have the right are shown to exist far more widely than is at present supposed. Even in the states possessing the best reputation for pure politics the machine is constantly and tirelessly at work. The

lack of interest on the part of so many citizens that enables the boss to rule the primary is ascribed to the increased individual activity and the complexity of private affairs characteristic of modern times. The demand to-day is for government without trouble or with very little trouble, a simple government. The machine understands this point thoroughly, and is quite content to furnish candidates, while at the same time it avoids discussion and the instruction of the people on public questions. The ideal statesman under such a system is a man skillful in intrigue, in organization, in diplomacy, and not necessarily a man skillful in propagating ideas of any kind. A study of the lives and methods of contemporary "bosses" will demonstrate the accuracy of this characterization. To this change in the type of our public men, Mr. Godkin ascribes the frequency of late years of "crazes" necessitating frantic "campaigns of education." The condition of a safe and successful democracy is the constant education of the people on public topics by leading statesmen, a condition that exists in England to-day as it did in this country in the days of Webster, and Calhoun, and Clay. The press cannot and does not do this work for the editor is not equipped for it, nor does the public expect it. Newspapers are most effective in spreading the views of distinguished public men, and such men have virtually disappeared from our political arena with the appearance of the machine.

The evils of the present system as stated by Mr. Godkin, who frankly calls it "the great canker of American institutions" are not to be questioned. A number of proposed plans for reform are discussed but each is shown to be defective in one or more particulars. Independent voting seems to have relieved the boss from the odious presence of the "kicker," and in the states where it has been most largely tried has succeeded only in making the machine more audacious and more insensible to warning. In conclusion, Mr. Godkin, while admitting the inadequacy of proposed methods of reform, expresses his conviction that this is one of the problems like slavery and reform of the civil service which are never seriously attacked without prolonged perception of their importance. Recognition of the magnitude of this question has come or is coming very rapidly. The search for remedies is already beginning; experiments, many of which may fail, will soon be tried but the history of modern democracy affords us every reason to expect a final efficacious solution.

PARK-MAKING AS A NATIONAL ART.

A deserved tribute is paid to Mr. Frederick Law Olmstead in the January *Atlantic* by Mary Caroline Robbins who reviews the park movement in the United States and estimates its value to our people, æsthetic and otherwise. It is largely owing to the inspiring genius of Mr. Olmstead that the park systems of this country are in conception unrivaled in the world. And popular education on this subject has provided so far, we believe, as to make the execution of his conception only a matter of time.

It is hard now to realize the struggle which the pioneers in this movement had to make against the apathy and prejudice of the people. The early history of Central Park affords ample illustration. "Men of wealth feared that the park would add to their taxes, and opposed it. The argument that certain European towns obtained advantage from their parks was met by an affirmation that the conditions being different, and Manhattan Island being surrounded by open water, artificial breathing places were unnecessary. A leading citizen even suggested that all that was required was to plough up a strip just within the boundary of the ground and plant it with young trees, chiefly cuttings of poplar, which might be transplanted later to the interior, so that the park

could be economically furnished with what was quite good enough for it. Somebody of distinguished professional reputation seriously urged in the newspapers that the ground should be rented for a sheepwalk, and that the sheep trails would serve the public for footpaths, and nature might be trusted to plant shrubs and trees near them in sufficiently picturesque fashion to make a suitable strolling ground. Others feared that a large park would develop riotous and licentious habits in its frequenters. 'Is it not obvious,' said a sapient writer in the New York *Herald*, 'that the great Central Park will be nothing but a great bear-garden for the lowest denizens of the city?' A prominent lawyer thought that it would be impossible to police it, and after the work was begun there were loud outcries against the reckless, extravagant, inconsiderate policy of those who had the making of the park in charge, one individual complaining that the designs were even fine enough for his private grounds."

It was not until about 1866 that Central Park began to be rightly appreciated by the citizens of New York. In the four years succeeding, however, more than thirty million visits were made to it by actual count. Its total cost, $14,000,000.00, has been repaid many times in its effect upon the inhabitants of this city, while the rise in value of neighboring property has been enormous.

The history of the park systems of Brooklyn, Boston, Philadelphia, Baltimore, Washington and Chicago is briefly narrated. With their development and expansion going on synchronously with the enormous growth of urban population we may well believe with Mrs. Robbins that the park is to become the common school of the nation's art.

THE STORY OF A PHILANTHROPIC PAWNSHOP.

In the *National Review* for April, Miss Edith Sellers describes the work of the Imperial Pawn Office of Vienna, which was founded by Emperor Josef I. in 1707. Originally intended as an adjunct to the Gross Armen Haus in its work of poor relief, the Imperial Pawn Office after a few years was placed upon a business footing and while organized and worked from the beginning for the express purpose of helping the poor, it began in 1717, ten years after it was founded, to pay a modest profit, which, with increased capital and business, has grown until for the year 1893 it amounted to 62,120 florins (about $24,848.00). Half of this sum is handed over to the Municipality of Vienna for poor relief; the remainder is used in extending the business of the Imperial Pawn Office. Only ten per cent. interest per annum is charged on all money lent, no matter whether it be one florin or ten thousand. "Some men," we are told, "make a point of depositing their Sunday clothes with their 'Uncle' every Monday morning throughout the year and of redeeming them every Saturday night." London pawnbrokers manage to make 400% a year by such little transactions while the Vienna Pawn Offices clear only 20% under a rule which allows them to charge interest for a full fortnight on what they lend for any shorter periods.

During the year 1893, 866,015 articles were pledged at the Imperial Pawn Office. On 773,120 of them the sum lent was under 10 florins ($4.00); on 90,069, between 10 and 100 florins ($4.00 to $40.00); on 2,773, between 100 and 1,000 florins ($40.00 to $400.00) and on only 53 over 1,000 florins. An average of 2,380 persons a day are accommodated.

A work similar to that of the Imperial Pawn Office at Vienna is carried on in New York by the Provident Loan Society at 279 Fourth Avenue. The following figures are taken from the report of the treasurer of the Society, Mr. James Speyer, for the year

1896: Total amount of loans made, $560,403.50, on 28,318 pledges. Average amount of loan $19.86; Average number of pledges received per day 92. The charge for interest has been made at the invariable rate of one per cent. per month or fraction of a month if over three days; no charge whatever has been made for tickets, or for storing goods, or for wrapping or hanging them up, or other incidental expenses which have in practice been made by some pawnbrokers.

The experience of the society during the three years it has been in existence amply confirms it in its conclusion that aid can be given on a strictly business basis by loans of money at one per cent. a month, or one-third of the legal charge made by pawnbrokers on small loans for short time.

POLITICAL AND MUNICIPAL LEGISLATION IN 1896.

In the *Annals of the American Academy of Political and Social Science* for March, 1897, Dr. E. Dana Durand continues the work, begun a year ago,* of reviewing the more important laws relating to state and local government enacted by various state legislatures during the year 1896. The following paragraphs on municipal legislature, are quoted from Dr. Durand's careful and comprehensive review:

"New Jersey's system of municipal government has long been in a most confused and corrupt condition. The practice of legislating out of office has nowhere been so common. It is perhaps owing to the exceeding density of the population in the northern counties that the legislature, forbidden by constitution to enact special laws for municipalities, has provided so many general incorporation laws. Most states have, aside from townships, only cities and one other class of municipalities, variously called towns, villages or boroughs. New Jersey has not merely four classes of cities, but also towns, villages, boroughs and borough commissions, while her townships are in many cases given organization and powers quite similar to those of higher grades of municipalities. Moreover, several general laws, presenting considerable difference, exist side by side for the government of almost everyone of these classes. Countless additional acts on special subjects have been passed, and as these have seldom specifically amended or repealed former enactments, a great mass of undigested and inconsistent legislation has accumulated, under which municipalities often stand on a very precarious legal footing. A marked change in all this will be effected by a law of 1896 which requires a special act of the legislature to authorize the incorporation of each municipality, although they are to be governed by general laws. While a more desirable reform would be a revision of those general laws themselves, till such a change is made the new practice will probably prevent some abuses. A start in the more needed movement was made last year by the repeal of all the acts for the government of boroughs and borough commissions, except that of 1878, under which all are required to reincorporate.

In Minnesota the very important constitutional amendment relating to city charters received popular approval at the last election. This measure provides, it will be remembered, that when it is desired to organize a village into a city, the district court shall appoint a board of fifteen freeholders, residents of the municipality for at least five years, to draft a charter. This, if the people favor it by a four-sevenths majority, becomes law. The charter board is to be a permanent body; amendments proposed by it from time to time require three-fifths of the popular vote for ratification. The

*See Ann. Am. Acad. Pol. Sci. 7: 411 (May 1896).

legislature is authorized to pass general laws paramount to local charters, but these may be of only three classes, applying to cities of more than 50,000, 15,000 to 50,000 and less than 15,000 respectively. The amendment further provides that the city council may consist of one or two bodies, but if there be two the members of one must be elected by the entire city. This "California" system of home-rule for municipalities has found somewhat unexpected favor in Louisiana, where an act of 1896 prescribes that whenever a majority of the property owners in any city or town shall frame and petition for the adoption of a new charter, an election must be held, at which a majority vote will suffice to put it into force.

The South Carolina Legislature last year made a beginning in the general municipal legislation demanded by the new constitution, adopting acts, not in themselves of special consequence, for the government of villages of two classes. The New York Legislature failed to take action on the bills for general laws regulating second and third class cities, submitted by special commissions established for the purpose.

The new charter of New Orleans, while not entirely readjusting the relations of powers, tends to increase the authority of the mayor. Two important heads formerly elected by the people are to be appointed by him, with consent of the city council. Certain other officers, formerly chosen by the council are to be named by the mayor, subject to confirmation. The council no longer has the power of summary removal. The most notable feature of the act is that it embodies, almost word for word, the stringent provisions of the Illinois municipal civil service law, adopted by Chicago in 1895. Another article requires that all ordinances granting franchises shall, after passing the council, be submitted to a board consisting of five chief executive officers, the concurrence of four of whom is necessary to approve the measure. Street railway, lighting and other important franchises must furthermore be offered at auction to the highest bidder. The forward civic movement in New Orleans is also signalized by the establishment of a commission to undertake the immensely difficult task of draining the city. The issue of $5,000,000 of bonds is authorized.

The system of assessments to cover the cost of local improvements, so universally popular in the North, has been slower in winning its way in the Southern States. In Virginia some of the many special municipal charters formerly authorized local assessments, but a law of 1896 first allows all cities and towns to make use of this method. South Carolina last year joined the numerous states which authorize municipalities to erect lighting and water plants. In South Dakota a constitutional amendment was adopted extending the debt limit of all local authorities for the purpose of supplying water for irrigation or domestic use. A rather strict limitation upon the granting of street railway franchises is that established by Louisiana, where a popular vote is requisite in cities and towns of less than 10,000 population. Ohio has partially followed the example set by Missouri in 1895, enacting that upon the consolidation of street railways the city or village may limit the fare over the entire line to five cents, with special rates for school children, may require a system of transfers, and may, moreover, every fifteen years, readjust the rates of fare and the percentages to be paid for the privilege. Amendments of interest were made in New York to the act of 1891 providing for an underground railway in the metropolis. The matter is dragging along very slowly, owing largely to the fear that should the city itself undertake to construct the system its debt would be carried beyond the constitutional limit. The too long delayed movement to restrict the height of buildings in cities is making some slight progress. Massachussetts, which already, in 1892, fixed 125 feet as the maximum for buildings in Boston, has now provided that along parks or boulevards in any city or town the

height may not exceed 70 feet, and may be further limited by municipal ordinance. Considerable agitation on the subject is being made in New York."

PUBLIC OWNERSHIP.

The *Independent* of May 6th publishes a number of valuable articles on the general subject of "Public Ownership" contributed by some of our best-known authorities on municipal affairs. Dr. Albert Shaw of the *Review of Reviews* discusses the "Advantages of Municipal Ownership." When such questions come up in German cities, says Dr. Shaw, "the decision never rests upon any doctrinaire grounds whatsoever, there is no airing of theories *pro* or *con*, but a careful and practical examination into the business facts." There are certain practical reasons which make extensive governmental business undertakings quite as advisable in the United States as in European countries.

Dr. Shaw draws an instructive comparison between the strength of municipal governments in Europe and their weakness in this country. Whenever a franchise for a limited term of years is granted in a German city it is the municipality and not the private company that dictates the terms. The rights of the people are so carefully guarded that after all it is a question of comparatively little moment whether the city exercises control only or embarks in direct ownership and operation. In the United States, on the other hand, there is hardly a large town whose government is strong enough to deal advantageously with corporate interests. Jobbery and rascality are so frequent even in the granting of small contracts that the direct employment of labor by the city seems to be the only way of escaping these evils. Dr. Shaw denounces the concerted movement on the part of street railway interests now being made all over the country to break down honest and able municipal government for the sake of obtaining fifty year extensions of their franchises and brands every man who uses his official power to aid them in their scheme as *prima facie*, a rascal. The boss system in its present form is largely supported by the contributions of corporations enjoying municipal supply privileges. The evils of the present arrangement are becoming so great that the burden of proof is being shifted upon the shoulders of those who defend it. With such conditions confronting us, the extension of municipal functions to include the ownership and operation of gas plants would at least "tend to build up the municipal government on the side of its dignity and prestige; so that in the end it might possess enough character, intelligence and stability to be able to meet a transit company or a lighting company on something like equal terms, and grant a franchise on terms which would not involve the betrayal of the rights of the community."

Prof. J. Laurence Laughlin in discussing the same subject agrees with Dr. Shaw that the question is one of expediency and local conditions and is not to be decided by *a priori* principles. The general presumption, however, he thinks to be against the ownership of such quasi-public institutions as gas works, street, cable or electric lines, as the following paragraph will show.

"We must always bear in mind the fact that under municipal ownership these properties must be managed on business principles, with great ability and sagacity, for a profit. Is it reasonable to suppose this can and will be done in American municipalities? And we must also bear in mind the solemn fact that municipal government is to-day admittedly the one branch of American political experiment in which we have failed. That is unfortunate, but it is a fact which we cannot blink. And it is no help in this discussion to urge what might take place under ideal conditions—how safe mu-

nicipal ownership would be under honest alderman, with a perfect reform of the civil service on the merit system, and assuming the existence of a vigilant and active public opinion. We must deal with our municipalities as they are, and not as they might be. And in this connection I venture to insist, and insist very strongly, that the examples of well-governed municipalities in Europe, like Glasgow, are for the reasons given above, aside from the point. Even the municipal ownership of gas works or street railways by Glasgow might work satisfactorily, that is no reason whatever why, for example, a city like Chicago, composed of entirely different elements, with different political standards than those of Glasgow, should follow this example. I am quite ready to admit that with ideal political conditions a city like Chicago might do things which now would be foolish and unwise. It is largely a question of expediency and local conditions."

In conclusion Prof. Laughlin expresses the belief that prudent arrangements with private companies including frequent renewals of franchises may produce nearly, if not all, the gains of competition in low charges and efficient service.

Prof. Seligman of Columbia University prefaces his discussion of the Public Ownership of the Telegraph and Telephone with a summary of the history of the Government Telegraph and Telephone abroad and deduces the following law of evolution which seems to hold good for all the media of transportation and communication.

"Everywhere at first they are in private hands and used for purposes of extortion or of profit, like the highways in medieval Europe, or the early bridges and canals. In the second stage they are 'affected with the public interest,' and are turned over to trustees, who are permitted to charge fixed tolls, but are required to keep the service up to a certain standard; this was the era of the canal and turnpike trusts or companies. In the third stage the government takes over the service, but manages it for profits, as is still the case to-day in some countries with the post and the railway system. In the fourth stage, the government charges tolls or fees only to cover expenses, as until recently in the case of canals and bridges and as is the theory of the postal system and of the municipal water supply with us at the present time. In the fifth stage the government reduces charges until finally there is no charge at all, and the expenses are defrayed by a general tax on the community. This is the stage now reached in the common roads and most of the canals and bridges, and which has been proposed by officials of several American cities for other services like the water supply. The rapidity with which the several stages are reached depends largely on the question of capital outlay and complexity of management.

So far as the telegraph and telephone services are concerned the United States and Canada still lag behind in the first, or primitive stage; but with the continual advance of democracy it may not be rash to predict that the arguments will continually become stronger for the assumption by government, first of the telegraph, and later of the telephone business."

Prof. Edward W. Bemis, whose investigation of the "Municipal Ownership of Gas in the United States" published by the American Economic Association in 1891 attracted so much attention, contributes an article on Municipal Lighting. Nearly two hundred cities in this country now own and operate electric lighting plants and the number is rapidly increasing and this in spite of adverse legislation procured by private companies. Cities have apparently been more ready to undertake electric than gas lighting, although profits are less in the former industry, mainly because electric lighting was wanted for streets. Another reason is that competition is active among manufacturers of electrical supplies while manufacturers of gas supplies are accused of discriminating against municipal plants.

In discussing municipal ownership of the gas supply, Prof. Bemis reviews briefly the experience of the twelve American cities owning their plants—Philadelphia, Richmond, Va., Alexandria, Va., Henderson, Ky., Wheeling, W. Va., Bellefontaine, O., Danville, Va., Charlottesville, Va., Hamilton, O., Fredericksburg, Va., Middleborough, Mass. and Wakefield, Mass.,—finding it generally favorable.

The Hon. Lee Meriwether, Missouri Commissioner of Labor, makes a strong plea for the municipal ownership of street railways based on the experience of the City of St. Louis, the street railways of which pay dividends upon $40,000,000 and taxes on only $4,246,190. The rental upon their franchises which should be $1,478,581 per year is actually only $47,500. The tax levied by law on every mile of track is evaded, one road owning and operating 76 miles paid taxes on only 84 miles. Although 1,480 cars are being used on the street railways of the city of St. Louis, license fees levied by law are paid on only 714. Mr. Meriwether is frankly of the opinion that with municipal ownership "it is hardly probable that political favoritism, wasteful contracts and extravagant expenses of operation combined could result in the loss of as many millions of dollars as are lost to the public under the present system."

The phenomenal growth of the city of Glasgow during the present century and the reputation it enjoys of being one of the best governed cities in the world makes the article of Mr. James Paton of special interest to American readers. The experience of this city with its water and gas supply and with its tramways is carefully reviewed by Mr. Paton who takes occasion incidentally to deny the rumor recently current in this country that the city of Glasgow derived such large amounts from its enterprises that it levied no taxes during the present year.

The article by Mr. William Epps, Secretary of the Australasian National League on State Ownership in Australiasia deals with state socialism rather than with municipal questions. Experiments in the ownership and operation of railways, telegraphs and irrigation systems by the colonies have not proven altogether successful. The tendency toward bureaucracy is manifest; the servants of the state are becoming its masters. In New South Wales one man in every ten is in the employ of the state. Schemes of retrenchment are avoided by the politicians while patronage with its constant and growing tendency to nepotism has become a dangerous weapon in the hands of the minister.

The *Independent* concludes this extremely valuable and timely discussion of public ownership with brief testimonies from a score of cities including Berlin, Sheffield, Manchester, and Birmingham, Eng., New York City, Philadelphia, Chicago, Jacksonville, Fla., Toledo, O., Chicopee, Mass., Bellefontaine, O., Richmond, Va., Peabody, Mass., Fairfield, Ia., and Bloomington, Ill.

THE MUNICIPAL GOVERNMENT OF SAN FRANCISCO.

"The Municipal Government of San Francisco" is the title of a series of articles contributed to the *Overland Monthly* (January, February, March and April, 1897), by Mr. J. H. Stallard. These articles have a far wider scope than their title would indicate being essays on municipal government in which San Franciso serves as an example of the American plan of city government. Mr. Stallard makes a plea for municipal government by "undivided corporate authority and responsibility in the form of an elected council," and says, "Nowhere in the world has this form of council government, under any kind of franchise or any method of election, failed to secure the services of honorable men to do honest and honorable work, without any necessity for checks and balances or the assistance of outside commissioners endowed with dis-

cretionary powers"; and further—"This form of municipal government is accepted in the greater part of Europe, in Australia, New Zealand, Tasmania, and Canada, and it is repudiated only in the United States where it has never yet been tried in any city." The successful working of the above system in England and Italy is described in some detail, and the author contends that the failure of San Francisco and other American cities to obtain honest and efficient government is because "individual responsibility as opposed to corporate is relied upon as the fundamental principle of American municipal government."

Mr. Stallard presents his side of the question with much fervor and ability, but hardly with absolute fairness to the opposite side. For instance, he contends that "there is no substantial difference in the conditions of any modern cities" apparently forgetting that "the spoils system was never practiced in England." This is a difference which should certainly receive very careful consideration as city government is bound to be corrupt so long as that system continues. Mr. Stallard does not consider the immense tide of immigration into the United States a disturbing factor in municipal government; on the other hand Americans generally will agree with Mr. Seth Low who says that "the immense tide of immigration into the United States is a continually disturbing factor. The immigrants come from many countries, a very large proportion of them being of the classes which, in their old homes from time out of mind, have been governed. Arriving in America, they shortly become citizens in a society which undertakes to govern itself. However well disposed they may be as a rule, they have not had experience in self-government, nor do they always share the ideas which have been expressed in the Constitution of the United States." * * * Consequently, in a city like New York, the problem of learning the art of government is handed over to a population that begins in point of experience very low down." According to Mr. Stallard, in England "men are not elected on account of politics but for their knowledge of business and their capacity for city government." The case in American cities is quite different, men are elected in many cases who have little or no fitness for the particular office they are to fill.

While it is unquestionably true that municipal government in the United States has often been a "public scandal," to hold that the trouble is entirely with our form of government is a mistake. Good government is possible under almost any plan of organization and something more than the form is responsible for good municipal government in Great Britain. We do not contend that our form of municipal government is the best, but simply that Mr. Stallard lays too much stress on the form as the cause of our failure. The indifference of our people in matters of municipal government, their willingness to allow politicians of the lowest order to occupy important public offices, and their tolerance of the spoils system would result in corrupt administration under any form of government. A reduction in the number of elective officers, the substitution of a single chamber for the bicameral form, single heads of departments, civil service rules and home rule have all been suggested as necessary to the efficient government of our cities; and until the American form of organization improved by experience has had a fair trial under favorable conditions, it cannot be said positively that the English system is better suited to our condition.

Mr. Stallard's articles show what is possible under intelligent and efficient government, and we heartily commend them to all who are interested in good government.

ART IN THE PUBLIC SCHOOLS.

Mrs. Sarah W. Whitman contributes to the *Atlantic Monthly* for May an article full of suggestion for those interested in the subject of art in the public schools. The laying out of school yards, the architecture of school buildings, the choice of busts, portraits and pictures for the walls of school rooms and the extension of manual training are a few of the topics discussed. By influences such as these American children are to be taught to rightly appreciate beautiful surroundings. Their parents are criticised as follows by Mrs. Whitman for having narrowly considered the useful to the exclusion of the beautiful.

"Especially in public buildings is this ignorant treatment seen; for here 'machine finish' has almost unlimited sway, and vulgar precedent is followed to the exclusion of many simple and excellent models which were the fortunate traditions of early colonial work. If one enters any of the more recent school houses to-day, one finds great care and pains shown in new systems of heating and ventilation; the rooms are lighted and warmed with increasing reference to health, comfort and general safety; but with these improvements is seldom found any recognition of the prime fact that practical convenience is perfectly served only when it is achieved *beautifully*. It must be remembered that it is in these school houses that the greater part of the children get their first impression of many things which, consciously or unconsciously, enter into life—impressions which create ideas, which control behavior. It is here that ideals are formed, here that much of what may be called home influence is felt; and here, accordingly, is it that all surroundings, as truly as all teaching, become part of the essential education. Very lately there has been a warm sentiment called forth in behalf of the improvement of these costly, sanitary, and yet cheerless and neglected school houses, and many things have been done hastily to repair the lapses of a so-called 'practical' period. Admirable gifts have been made of photographs and bas-reliefs, and much has been said of cultivating a patriotic spirit in our schools. This shows an excellent intention, but one must go deeper, must make beauty more organic; for the danger to-day is that of laying what may be called a veneer of beauty on this commercial substructure, and then thinking, comfortably and fatuously, that we have put art into the public schools."

SEWER ASSESSMENTS.

The January number of the *Journal of the Association of Engineering Societies* is devoted in large part to a discussion of Sewer Assessments with especial reference to the methods employed by Massachusetts cities. Mr. F. Herbert Snow contributes the leading paper of the series in which he explains and criticises the frontage, area, entrance fee, valuation, rental and general taxation plans of paying for sewer construction. The method adopted by Brocton, Mass., which was designed by Mr. Snow is fully described. Other papers of this series are confined to the systems of the following cities: Boston, presented by Charles R. Cutter; Newton, Mass., by Henry D. Woods; Malden, Mass., by George A. Wetherbee; Marlboro, Mass., by James F. Bigelow; Fall River, Mass., by Philip D. Borden, and Pawtucket, R. I., by George A. Carpenter. A general discussion of the subject by Allen Hazen, George A. Kimball, George Bowers, F. P. Stearns, Freeman C. Coffin and Thomas Appleton is appended.

THE SMOKY PILGRIMS.

Prof. Frank W. Blackmar of the University of Kansas contributes an article to the January number of the *American Journal of Sociology* that rudely shakes the theories of those whose panacea for city evils is the abolition of cities and the return of the people to an ideal, rustic life. "The country," says Prof. Blackmar, "has its own social evils and social residuum; it takes something more than an abundance of fresh air and sunshine to make a healthy social atmosphere. The weakening tendency of isolation and monotony is as evident as are the effects of urban over-crowding. Many (country communities) suffer from under vitalization and lack of proper sanitation."

To illustrate this contention Prof. Blackmar makes a careful study of a familiar type of a pauper family, residing in a small Kansas town. Readers of "The Juke Family" and "The Tribe of Ishmael" will readily recognize the same traits of degeneration in "The Smoky Pilgrims" who in spite of their country environment, live continually on the borders of pauperism, prostitution and crime. The difficulty of dealing with cases of this sort in small communities brought about by the indiscriminate almsgiving of kindly disposed neighbors, the apathy of local officers and perhaps most of all by the abominable condition of our country jails, which are "at present the most prolific breeders of crime in the land," makes a problem for the small community which in proportion to its size is perhaps as difficult of solution as any of those which must be faced by our great cities.

THE POSITIVE VALUE OF QUIET AND BEAUTIFUL STREETS.

Mr. J. W. Howard contributes an article to the *Engineering Magazine* for March on "The Positive Value of Quiet and Beautiful Streets." A series of illustrations showing the condition of a number of typical streets in foreign and American cities enforces the many valuable suggestions made in the text. The narrow, muddy, germ-laden streets characteristic of Turkish, Spanish and South American cities, are contrasted with the best examples of street making in the most progressive European and American cities. Not the least valuable of Mr. Howard's suggestions is that relating to the employment of expert talent by cities to supervise the paving and care of streets.

"Street engineers of true worth are as much needed as bridge, sanitary, hydraulic, landscape and other engineers. All are subdivisions of civil engineering. Such men are steadily replacing mere politicians and the ignorant or apathetic employees of cities or contractors. They accomplish maximum results with minimum expense. They unite theory and practice of the past and present. They have access to the recorded experience of others, and thus avoid useless experiments.

The results tell the story. Compare the new asphalt and granite pavements of New York with those of 1887. Examine the streets of Washington, Paris, London, Berlin, and a few other cities, and you will find the good results of honest administration, with trained men in charge of pavements. Every thinking man can name other cities, where the poor pavements indicate either that honesty is not present, or that trained, educated men are not in charge of street construction."

THE RELATIONS OF GOOD PAVING TO STREET CLEANING.

In the February number of the *Engineering Magazine*, Col. George E. Waring discusses the relative merits of different kinds of street pavements from the standpoint of the street cleaner. Asphalt of good quality, well laid, seems to have the majority of

points in its favor, but owing to its tendency to become slimy under a light rain or heavy mist it must be kept constantly in something more than "a fair state of cleanliness." In the case of asphalt there is no admixture of earth from below such as the street cleaning department has to deal with when cleaning stone block pavement. As a matter of fact, a perceptible portion of Manhattan Island now works up through the crevices of our stone pavement, and is daily sent out to Sandy Hook lightship at a cost to the city. Col. Waring emphasizes the disadvantages to the city caused by improperly laid railway tracks as follows:

"Whatever the character of the pavement, we have one condition that adds enormously to the labor and cost of even tolerable cleaning—namely, the bungling construction of our street railroad tracks. They seem to have been laid, save on the cable lines and a few others, with regard only to the convenience of the railroad companies, and nearly all our street car lines make the maintenance of a good roadway impracticable, and the work of cleaning difficult and unduly costly. We are reforming in this regard as in many others. The tracks of the Broadway cable road and its extensions, and those of the Third Avenue cable road, are a great improvement on anything we had before, while the track now being laid on First Avenue is decidedly better than these.

But the old tracks of most of the horse-car lines are a terror to all who use the streets for driving or for wheeling. The worst form is the 'centre-bearing' rail, which is a square ridge of iron, with a deep, wheel-wrenching channel on each side. These depressions are ideal harbors of dirt. Many of the good asphalt streets in the East Side tenement quarter have two of these double channels, bordered with rows of granite blocks. But for this condition, these streets could be kept as clean as a floor,—as Lexington Avenue, with asphalt close up to the rail, is kept now. It would pay the city well, if only in the reduced cost of street cleaning, to reconstruct these tracks at its own expense, laying a properly designed rail directly in the asphalt.

It is notorious that the cost of street cleaning in New York is inordinately high. The cost for sweeping alone in 1896 will run up to about $1,155,000. With perfect asphalt pavement, and the best form of car-track rail, this could be reduced by fully half a million dollars, and much better work could be done for the smaller amount. This shows that the relation between paving and cleaning is so important that all paving work should be carried out with the full consideration of the requirements of the best methods of cleaning."

STREET CLEANING IN PARIS AND BERLIN.

Mr. Robert Grimshaw contributes an article on "Street Cleaning in Paris and Berlin" to the April number of the *Engineering Magazine*, that will be of equal interest to the specialist and lay reader. Departmental organization, methods of work, machinery employed, and results obtained in the two cities are carefully described. Mr. Grimshaw describes the method of removing snow in Paris and the financial results in the two cities as follows:

"Paris is not often visited with a heavy snow storm, and up to the winter of 1880, the snow was removed from sidewalks and courtyards by the householders, while the administration managed to get rid of the snow by means of carts obtained from the omnibus company, the garbage contractors, and other sources of supply. But a heavy fall of snow in 1879 brought out an ordinance that went into effect in October, 1880, under which every able-bodied laborer can, at the beginning of the winter, register himself as a snow cleaner, whereupon he will be assigned to some specified place at which place he is to report at every snow fall.

The streets are classified according to the urgency existing for the removal of the snow. First, the wide streets, in which the snow is heaped into rows, with a clear space of from 16 to 24 feet in the middle. These piles, as the weather permits, are removed, made into one, or strewn over the roadway. Second, the narrow streets, with a heavy traffic, where the snow must be entirely removed. Third, streets where the snow can be thrown into a single row, and allowed to remain until a thaw.

The snow that is carted away from the ten wards bordering the Seine is dumped into that river, where there are forty-two dumping places. Those wards which do not lie along the river, use the gutters and sewers for snow dumping, both hot and cold water being used to assist in rapidly carrying it away. As the removal of snow, even by the means described, would occupy too much time, a portion of the work is done by private contractors, the streets being divided into twenty-eight contract districts, each having a dumping place in the Seine, the sewers, or elsewhere. So, when a specially heavy fall of snow occurs, all available municipal means are employed, and the contractors are set at work, their pay being based on the number of cubic yards removed, with results highly satisfactory.

"As for the total expenses of the Paris department, the latest figures available are those for 1891, when they amounted to about $660,000—figures that are interesting from the fact that they represent work thoroughly, promptly and constantly done, under all conditions of temperature and weather. No excuses are offered, and none accepted, for work imperfectly or intermittently performed. The merchants recognize the fact that clean streets represent profit, and dirty ones loss, and they would rebel in a week if the work of street cleaning was in the least slighted. In Berlin the total annual expenses of the department are about $405,000, from which must be deducted various incidental receipts, amounting to about $31,000, leaving a total net expenditure of about $374,000. A portion of the receipts is due to the obligation of the railroad companies to clean and sprinkle all streets in which they have their rails. Double-track streets must be cleaned to a width of 18½ feet and single-track streets to half that width. The department, however, does this, the railway company paying three-fifths of the actual cost."

COMPARISON OF STREET RAILWAY CONDITIONS AND METHODS IN EUROPE AND THE UNITED STATES.

Mr. P. F. Sullivan, general manager of the Lowell and Suburban Railway, contributes an article to the April number of the *Street Railway Review* comparing Street Railway Conditions and Methods in Europe and the United States. Mr. Sullivan made a careful personal investigation of the street railways of Glasgow and Berlin during a recent visit abroad, and has gathered an interesting array of facts and figures from these two cities which he uses as a basis of comparison with American municipalities. Recent figures showing financial benefits derived by these two cities from their street railways are as follows:

" Glasgow received in 1894 from the lessee who operated her roads, $28,800.00 ; from the Street Railway Department after beginning the municipal operation of street railways, the city received in 1895 $41,800.00, and in 1896, $45,000.00. In other words the municipal treasury received $16,700 more in 1896 from its own operation than it received in 1894 from the lessees, but there was this difference that in 1894, the municipality had only $717,475.00 invested; in 1896, $2,582,780.00 with the added responsibility. It must be added, however, that the street railway department paid the interest on the loan at a rate less than 2¾%.

In Berlin it may be stated in general that the company pays rates from 4 to 8% on its gross receipts. Notwithstanding these payments, the company paid and has paid 12% dividends on its capital stock. This will not surprise any street railway man when he considers that there are only 180 miles of track for 1,800,000 people."

Mr. Sullivan finds the method of regulating fares according to distance travelled as is the custom in Great Britain and on the Continent very objectionable. In support of his contention that rates of fare in Europe are actually higher and not lower than in this country he divides the maximum cash fare by the longest ride possible on street railways to obtain the transportation rate per mile. This statistical method will be correct when the object of people riding on street railways is to see how far they can go rather than to get somewhere. Mr. Sullivan is also of the opinion that "the principle of charging a distance rate works injuriously against the laboring and artisan classes, the very classes that street cars are chiefly intended for; that it has resulted in such crowding, such density of population as to cause municipalities abroad the greatest concern, upon which they spend as much, if not more, to regulate than is received from street railway franchises; and that such a condition with respect to density of population, is not known in the United States because of superior street railway facilities."

It will be observed from the following that the greater security enjoyed by capital invested in street railways abroad is a result of the fair and equitable relations subsisting between the companies and the cities, and the absence of any attempt or possibility of an attempt on the part of the former at the bribery or deception of public officials to defraud the city.

"The street railways of the United Kingdom are constructed and operated under the General Parliamentary Act of 1870. That act in practically its present form has been the basis upon which all contracts and franchises were made and granted. Those who invested their capital, therefore, knew with reasonable certainty what the conditions would be with respect to legislation during the existence of the contracts. The same situation with respect to changes exists in Germany. The financial departments of municipal governments are skilled in all matters relating to finances, so that when the government and those seeking a franchise meet, both parties are fully informed, and the result is usually satisfactory to both parties. After contracts are signed, there is no disturbance. How different in the states! Capital is invited to embark in an enterprise, the public is enthusiastic in its applause, and in a very few years the same public is clamorous against the particular investment which it fostered and encouraged."

The many valuable statistics and arguments presented by Mr. Sullivan make this a very useful and interesting contribution to the rapidly growing literature of municipal control. The absence of abuse and the manifest attempt at fairness characterizing it are to be commended to many partisan writers on the same question.

THE FINANCIAL RESULTS OF CABLE AND ELECTRIC RAILWAY OPERATION IN THE UNITED STATES.

The April number of the *Street Railway Journal* contains the first of a series of articles on the "Financial Results of Cable and Electric Railway Operation in the United States," from which the following summary for the states of Massachusetts, Pennsylvania and New York is taken.

"Capital.—In 1885, the combined capital liabilities of the street railways of the three states amounted to about $86,000,000, equivalent to about $51,000 per mile of track; by 1888–89 the stock and debt had risen along what were evidently normal lines of increase,

to $116,000,000, equivalent to $54,000 per mile of track, while in 1895–96 the capital liabilities amounted to $411,000,000, equivalent to $88,000 per mile of track.

Now, this enormous capitalization, amounting to $411,000,000 (about 25% of the entire capitalization of American street railway systems), undoubtedly contains a certain amount of "water" injected by the various syndicates and promoters through whose hands the properties have passed, but it is probably true nevertheless, first, that the difference between the actual accumulated cash investment in the properties, and the par value of the capital liabilities outstanding, is much less than is generally supposed; second, that it is much less than the promoters and syndicates intended it should be; and, third, that the present cost of duplicating the tangible assets plus the present cost of purchasing rights of way would probably be not much less than the outstanding capitalization. Engineering and financial mistakes have been made, most serious in their consequences to the properties. These mistakes have had, and will have to be paid for and the burden of doing this has necessarily come upon the stockholders. Even, therefore, in cases where their stock represented little or no original investment, it represents to-day a great deal, and is likely to be in future classed as "fully paid in," in one form or another. Again, while the cost of duplicating the tangible assets alone would be far less than $88,000 per mile as a general average of the three states, it is true that the franchises and privileges obtained from the municipalities and the abutters could not be had to-day without the payment of enormous sums, owing to the increase in value of city property brought about in every case by the existence of these transportation agencies, and it is not far from true therefore that the combined properties are worth a large proportion at least of their capital liabilities.

Total Receipts.—In 1885, the combined street railway systems of Massachusetts, New York and Pennsylvania earned nearly $30,000,000, equivalent to about $17,700 per mile of track; and in 1888–89 the earnings had shown a normal increase to about $35,000,000, equivalent to about $16,500 per mile of track; and in 1895–96 they had increased in far more rapid ratios, to about $64,000,000, equivalent to $13,700 per mile of track. The total mileage in 1885 was 1,669; in 1889, 2,120; and in 1896, 4,667.

The three thousand miles of track built since 1885 must necessarily have been in territory far less valuable, as regards density of traffic, than that served by the 1,600 miles found in operation in 1885, which must have been, broadly speaking, laid down in the principal streets and along the best traffic routes of the different cities. The inference may also be drawn, with considerable reason, that the gross earning power per mile of these properties is destined to increase in future.

Operating Expenses.—In 1885, 73.3 per cent. of the total receipts were consumed by the entire street railway systems of the three states in paying operating expenses and taxes; in 1888-89 the cost of operation was 77.1 per cent.; and in 1896, 68.7 per cent. If we exclude the figures of Pennsylvania, which are by no means as reliable as those for the other two states, we obtain as the respective percentages of operating expenses in the three years, 75.9 per cent. in 1885, 80.1 in 1888–89, and 66.6 per cent. in 1896. It is, of course, needless to say that to improved motive powers alone is to be attributed these falling ratios of operating expenses to total receipts.

Net Earnings.—The test of these improved motive powers is found in a comparison of the old and new percentages of net earnings to the total permanent investments. For reasons which may be easily inferred from the above discussion, it is impossible to arrive at any close figures of the actual cash investment in the street railway properties of the three states under consideration. This much may be said, however, that with the possible exception of the street railway companies of New York City, the figures given for "total permanent investment" in 1888–89 were not far in excess of the actual cost

of plant and equipment and the net earnings were quite surely at least as large as they ought to have been with proper methods of accounting.

In Massachusetts this return upon the investment was 6.8 per cent., in New York (including New York City) 6.2 per cent. and in Pennsylvania the return was apparently 24.1 per cent. The Pennsylvania figure is not at all reliable, but at the same time it is probably true that the horse railways of Philadelphia and Pittsburgh, in particular, were unusually valuable properties, and were in that year capitalized at very low figures per mile of track. This is indicated by the fact that the great traction companies of Philadelphia are to-day paying to roads which they lease, guaranteed dividends ranging from ten to sixty per cent. on the paid-in capital stock.

The annual net earnings have largely increased during the past twelve years. In Massachusetts the precentage return upon the (balance sheet) investment is almost exactly the same to-day as it was in 1885 and in 1889. In New York it is now but 5.5 per cent. as against 8.7 per cent. in 1885, and 6.2 per cent in 1889, but in view of the extremely heavy capitalization in New York, amounting to an average of $129,500 per mile of track for city and surburban roads together, it is certainly a remarkable thing that it has been possible to keep the percentage return anywhere near the present figure. In Pennsylvania there has been a heavy fall in the percentage return on investment owing to the multiplication of "traction companies." Attention should again be called, however, to the fact that the final figures in Pennsylvania, namely, 7 per cent., are considerably below the truth, on account of the fact that the net capital stock outstanding is undoubtedly less than the figures indicate."

The second article of this valuable series which appeared in the May issue of the *Street Railway Journal* is devoted to a consideration of financial results in the state of Massachusetts. Subsequent papers will continue the discussion of the results of individual street railway systems.

COMPRESSED AIR FOR CITY AND SUBURBAN TRACTION.

Mr. Herman Haupt discusses in the January and February numbers of the *Journal of the Franklin Institute* the virtues of compressed air as a motive power for city and suburban traction.

"Compressed air motors have been in successful operation in France for many years, and they are now rapidly establishing themselves in public favor in the United States. They have been constructed and tested at Rome, New York, continuously for two years, in all conditions of weather, and have given satisfaction even at temperatures below zero. Several motors are now, and have been, running for some months on the One Hundred and Twenty-fifth Street Railway, in the City of New York, in daily service, without having lost a trip and with great satisfaction to the public."

Very erroneous opinions have been and are yet entertained in regard to the power lost in compressing air, the frost produced in expansion, the danger of explosion, the reheating of dry and moist air, the cost of plant, the necessity for frequent renewals of air supply, the possible length of run, the loss by transmission of air to distant points, and other matters connected with the practical application of air as a motor power. A large part of Mr. Haupt's article is devoted to a technical discussion of these points. The general advantages of this form of motive power are summed up as follows: "An important advantage of compressed air motors is found in the fact that each motor is independent and unaffected by any derangement of feed or trolley wires, cables or dynamos. They can run on any line, in connection with any system, and at any rate of

speed. The introduction of air motors can be gradual ; one motor can be tried, and, if satisfactory, the number can be increased to a full equipment. The steam required for electric or cable lines can furnish the little that is required for an experimental compressor, and will be more than sufficient for a full equipment. No outside expenditure whatever is required—no conduits, poles or wires. In this respect it differs from other systems, and permits a test to be made at a minimum of cost ; but compressed air motors can no longer be considered as experiments. While they may not have attained the utmost limit of perfection of which they are capable, the experience in Europe, in Rome, N. Y., and in the City of New York, should be sufficient to satisfy the most skeptical."

STREET RAILWAYS AND THEIR RELATION TO THE PUBLIC.

In the *Yale Review* for May, Mr. C. E. Curtis discusses the relations of street railways to the public in Great Britain, Canada and the United States. On the basis of a careful comparison of the methods of granting franchises and controlling the operation of street railways in these countries, Mr. Curtis makes the following summary:

"The question is sure to arise, 'Has the American policy of practically free trade, as applied to street railways, secured to the people enough to make up for the evils incident to the system?' The system has certainly secured for the people an efficient service developed with marked rapidity, while it will be urged that the English policy has retarded the growth of transit facilities and that the towns have injured themselves in their anxiety to drive sharp bargains with the companies. The most palpable advantage of the English system is perhaps that of cheap fares. The usual fare on English tramways is one penny per mile, or fraction thereof, while Glasgow, under municipal administration, has made a rate of one-half penny for one-half mile stages. In the United States the almost invariable usage is a five-cent fare as the minimum for even the shortest distance, though in some cities a passenger may travel a maximum distance of ten or fifteen miles for the same fare.

The very liberal treatment that has been accorded to the companies in the States may have had much to do with the larger mileage in American cities, and it is difficult to say just how much of the English lack of development is due to the restrictions of the 'Tramway Act, 1870,' and how much is properly chargeable to the national traits of conservatism and dislike of new methods, and to the dread of anything that is likely to mar the beauty of historic places or involve any infringement upon long established property rights. From whatever cause, and probably from a combination of various causes, the actual street railway service of England, both as to mileage, car frequency and speed, cannot be considered as equal to that of the cities of the United States. Also in most of the large English cities horse power is still used, while the horse car is nearly obsolete in the United States. The relative advantages and disadvantages of the two countries may be summed up as follows:

England gains, 1st, by a much lower rate of fare for short distances travelled; 2nd, by much greater control over the companies in all matters pertaining to their relation to the public ; 3rd, by a system of short-term franchises, with provision for purchase of the tramways by the municipality; while by the actual ownership of the tramways in many cases better terms as to rates of fare, street rentals, etc., may be obtained from the companies, and largely increased revenue secured to the town as one of the conditions of the contract or lease with the operating company.

The United States gain by a rapid development of electric street railway facilities, which furnish a car service wherever it pays. This development has probably done

something toward making suburban property available for homes, and thereby increasing the grand lists of the towns. It has increased the comfort and the possibilities of usefulness for many citizens, and has enabled large numbers of people to more fully economize their time. On the other hand, it has been attended with all sorts of abuses, such as over-capitalization and unreasonably high rates of fare, while legislative and municipal scandals in regard to 'charter grabbing' have been only too common. The patrons of the roads are obtaining a good railway service, but at high cost.

The Englishman secures a relatively poor service at low cost, while he pursues a policy which, while it may retard development, yet protects the interests of the public at large and deters mere speculators from attempting the exploitation of the towns.

As a modification upon the stringent regulations of the English, the practice in Canada may be cited. The system now in operation in Toronto has in it many points worthy of imitation. The conditions of life there are so similar to those prevailing in many places in the United States that the experience of the Canadian city should be of much value. Toronto owns but does not operate the railway, whereas in England the tendency is now toward public ownership and operation also. For American cities to undertake this experiment would involve such grave objections through political abuses as to far outweigh the possible advantages, especially as it is yet to be shown that the working of the tramways by English municipalities has in itself wrought substantial benefit to the citizens.

Is not the best solution of the problem rather to be found in closer legislative control, in the limitation of the term for which charters may be granted, in the recognition of the value of the franchises and payment therefor, and in providing that rates of fare and other details of operation shall be matters of contract between city and company, to be determined when the charter is granted, and subject to re-adjustment at stated periods thereafter?"

THE REDUCTION OF STREET CAR FARES.

The *Street Railway Review* of February 15th publishes an elaborate article on "The Reduction of Street Car Fares," which it illustrates with a series of diagrams from 28 American cities showing longest possible ride for one fare and comparing decrease in rates of fare thus shown with prices of other commodities. In general the *Street Railway Review* concludes that "The price of car fares not only has been reduced, but that no other article of as common use has been as greatly reduced in price. The position of the street railway of to-day is very like that of a tailor, who ten years ago, made the clothes for a boy, and who to-day, the boy grown to manhood, is still making the suit for the same person, only of vastly better quality and workmanship, for the same price he received then. The riding public has demanded better cars, longer cars, faster cars, more frequent cars, earlier cars, later cars, all night cars; all these have been given but with no advance in the price of a ride. The public has asked each year to have the ride lengthened a little, with no similar elongation in fares, until in many instances the increased ride is now longer than the original haul. All this the street railway companies have done. Then the public wanted free transfers to other lines where ten years ago an extra fare was cheerfully paid, and all over the country, wherever it was possible to do so this privilege has been granted. It is even possible in one city under the (too) liberal transfer system for a passenger to ride one hundred miles in one day on a five cent fare.

Twenty-eight cities show an average increase in the length of a five cent ride in

1897 as against the ride in 1887, of 237.5 per cent. Another way of stating the same thing is that on the basis of charge then, the company should now receive 16.85 cents instead of the five cents it does receive. There is no other commodity of general use which begins to show the reduction in price that car fares show."

VILLAGE IMPROVEMENT SOCIETIES.

Whatever opinion may be held of the recent active participation of women in municipal politics, the work of Village Improvement Societies which has been almost entirely feminine in its conception and execution will meet with unqualified approval. On this subject Mary Caroline Robbins writes very entertainingly in the February *Atlantic Monthly*. The Village Improvement Movement in England owes its origin to Maria Edgworth. In this country it was first taken up by Miss Mary Hopkins, afterwards Mrs. Goodrich, who founded in 1853 the Laurel Hill Association of Stockbridge, Mass. The influence of the city dweller taking with him on his summer vacation spent in a country place certain metropolitan ideas of neatness, cleanliness and sanitary methods has contributed materially to the brilliant success that has crowned the efforts of Village Improvement Societies. As a result of their enlightened work, parks, gardens, libraries, shade trees, well paved, cleaned and lighted streets, sanitary drainage systems and other improvements adding to the healthfulness and comfort of life are found in many of our smaller cities and villages that otherwise with the limited experience, indifference to progress and niggardliness in the expenditure of money for sanitary and aesthetic purposes characteristic of too many communities might have been deferred until too late.

In the State of Massachusetts more than sixty towns have established improvement societies and the movement seems to have taken foothold all over the country. The work of many of the more prominent organizations of this character covering an extremely wide field is briefly described by Mrs. Robbins. In regard to the best method of starting a movement of this sort the following may be of interest to many readers:

"It is, above all, important that everybody in a town should be persuaded to take an interest in the subject; and probably the easiest way to get at the whole public is to take advantage of the meeting of an agricultural society, or other such organization, and make Village Improvement the topic of a free lecture by an interesting speaker. A society can then be organized by those who have zeal and energy to carry it on, assisted possibly by the sympathy of the whole community. A small annual fee, perhaps of one dollar, is usually charged for membership, and the fees, together with voluntary contributions, yield a fund to begin work with. When the society shows itself efficient and earnest it can occasionally persuade the town authorities to make appropriations for some definite improvement which its committees will undertake to manage and supervise.

The different kinds of work attempted by the society may be divided among committees; and it is wise to have a board of managers, one-half of whom may be women. The Board of Managers should have authority to transact business and to appoint the members of standing committees. With such an organization as this to raise funds and carry on work, a great deal can be done in any community. The value of such work as an educator of artistic taste is very great, and its appeal to civic pride rouses a sentiment which cannot be too widely encouraged."

SANITARY PROBLEMS CONNECTED WITH MUNICIPAL WATER SUPPLY.

Prof. W. P. Mason discusses very entertainingly and instructively in the May number of the *Journal of the Franklin Institute* various sanitary problems connected with municipal water supply. The need of public education on sanitary topics is well brought out in the following: "Ocular evidence of purity is quite sufficient for most people. The bright and limpid water from a well which drains a graveyard is counted a blessing by those who would shudder at the thought of a cholera ship touching at one of our most distant ports. Nor is faith in the self-purifying power of running streams any less pronounced. The writer had the following curious criticism made of his report condemning the use of a sewage-laden river water: 'We would hint to Prof. Mason that every impurity which enters the river is either heavier or lighter than water. If it be heavier, it sinks quietly to the bottom; if it be lighter, it will remain on the surface a few hours, when it will be blown ashore by the wind. Water taken midway between the surface and bottom of the river will always be found as pure as the best spring water.'

So long as such notions find expression in the daily press, so long we may be sure, are the people ignorant and misinformed upon questions very nearly touching their safety, and so long there is direct need of suitable sanitary education."

Prof. Mason cites many interesting specific examples from the experience of foreign and American cities showing the necessity for a pure and healthful water supply. The following application to the city of Philadelphia presents the case in a new and startling light.

"Suppose some public undertaking (the much-accused trolley system, for instance) were so badly managed that 528 human lives were crushed out annually and some 4,707 other persons were more or less seriously injured,* do you suppose that the good people of Philadelphia would tolerate such a state of affairs or that they would grudge the amount of money necessary to stop such carnage? Surely not; yet they are submitting quietly to just as large a loss from death and disability, only it comes in a way less tangible and less shocking to the feelings.

There is, believe me, no system of filtration, or other efficient method for purifying a polluted water, so expensive but that a community can well afford to introduce it rather than to drink a dangerous water in its raw state, and this, too, from purely economic considerations, and leaving out of sight all ethical questions whatsoever.

Without wishing to 'thrash old straw' let me ask such as may have doubts upon this point to read again the history of the epidemic of typhoid fever in the valley of the Tees, and the records of the late cholera plague at Hamburg, and to note what such dire experiences have taught and what use has been made of the teaching. Finally, let us inquire, do those interested in the furnishing of water to a town ever permit a factor to enter their calculations representing the pecuniary damages that might be claimed by parties who receive bodily injury through the use of impure water? This question appears to be assuming some magnitude just at present, and if the courts look favorably upon it, there is scarcely a limit to the proportions it might assume. Sundry suits are now pending in the West to recover the legal value of human life alleged to have been destroyed by typhoid fever, contracted by the use of impure water. Such suits are based upon evidence tending to show that the public waters in question are seriously polluted by sewage, and are consequently sources of disease.

*Deaths and sickness from typhoid fever in Philadelphia, 1890 to 1894 inclusive. Prof. Mason estimates the total annual loss to the city from this cause alone at $1,392,226.00.

Fancy, if you will, what a disturbance would ensue in water circles should these plaintiffs gain their causes. Precedents would be established that might well carry financial ruin to many a corporation, whether public or private, and figures of such size for damages would be added to those representing yearly loss already given, as would make the most conservative member of the Board of Water Commissioners admit very candidly that cheap water may be at times a poor investment."

THE PURIFICATION OF WATER.

The *Chautauquan* for February contains an article by Dr. Frank J. Thornbury on "The Purification of Water," from which the following on sand and electrical filtration is taken:

"In imitation of the processes of nature several large municipalities both in this country and in Europe have had huge sand filters constructed, through which water before its distribution for consumption is allowed to slowly trickle, the gross impurities being strained out, as it were. In many instances this attempt has been successful in changing a dirty or even muddy water into a clear and limpid fluid. When we consider the fact that a number of natural water supplies which were originally pure have become, as the penalty of increasing population, virtually diluted sewage, we must realize the extent of refuse which will accumulate in one of these filter beds after only a short usage. And strange to say it is the mechanical action of this sediment itself, which swarms in low forms of vegetable life, that is to improve the filtering capacity of the sand bed. The sediment occludes the pores which will be present in even the finest sand obtainable. A filter like the foregoing is, then, simply a dense bed of bacteria and slime, composed largely of degenerated vegetable substances. Notwithstanding all this, water which passes really seems to improve as regards the number, at least, of the bacteria which it contains. However perfectly a large sand filter may functionate, some bacteria will always be found in the effluent and their increase to as many as 2,310,000 per cubic centimeter in 36 hours has been noticed. As the filtering material consists essentially in a mass of dead and living organisms it is only too apparent that objectionable bacteria—pathogenic—might make a filter a source of danger rather than of service.

Thus far few cities have employed electrical filtration, but recently the municipality of Lexington, Ky., has been subjecting its water to this form of treatment. The daily water consumption of Lexington is 24,000,000 gallons. By the method employed all nitrogenous substances—including animal refuse, decaying vegetable matter, etc.—are attacked by the ozone generated and rendered harmless. The quantity of free oxygen liberated by the electric current being absorbed by the water renders it healthful and sparkling. Altogether the water receives the discharge of three Ruhmkorff coils—80,000 volts—to say nothing of the treatment to which it is subjected in the secondary vats. An analysis of the water when it issues from its final ordeal reveals that it is chemically pure. But here again with electrical purification we have the omnipresent expense to consider, and a prominent health authority who has given the subject attention claims that this feature renders it impracticable in many cases."

BIBLIOGRAPHICAL INDEX.

(NOTE.—The following subject index is intended to continue the work begun in the first (March) issue of MUNICIPAL AFFAIRS, which was entirely devoted to a Bibliography of Municipal Administration and City Conditions. In the following pages, books, pamphlets, and magazine articles of interest to students of city government, which have appeared during the last six months (January-June, 1897), are listed alphabetically either separately or under general topics. A few articles, mainly from foreign periodicals, which were published late in 1896 and arrived too late to be listed in the Bibliography are also included in the present list. Future numbers of MUNICIPAL AFFAIRS will contain similar indexes covering the literature of each preceding quarter.)

PERIODICALS AND ABBREVIATIONS.

American Architect, Boston	Am. Arch.
American Economic Association Publications, Baltimore, Md	Am. Econ. Assoc.
American Gas Light Journal, New York	Am. Gas Light J.
(American) Journal of Social Science, Boston	Am. J. Soc. Sci.
American Journal of Sociology, Chicago	Am. J. Sociol.
American Law Review, St. Louis, Mo	Am. Law R.
American Magazine of Civics, New York	Am. M. Civics.
American Statistical Association Publications, Boston	Am. Statis. Assoc.
Andover Review, Boston	Andover R.
Annals of the American Academy of Political and Social Science, Philadelphia	Ann. Am. Acad. Pol. Sci.
Architectural Record, New York	Arch. Rec.
Architectural Review, Boston	Arch. Rev.
Architecture and Building, New York	Arch. & Buil.
Arena, Boston	Arena.
Atlantic Monthly, Boston	Atlan.
Banker's Magazine, London	Bank. M. (London.)
Banker's Magazine, New York	Bank. M. (N. Y.)
Bibliotheca Sacra, Oberlin, O	Bib. Sacr.
Blackwood's Magazine, Edinburgh	Blackw.
Canadian Magazine, Toronto	Canadian M.
Century, New York	Cent.
Charities Review, New York	Char. R.
Chautauquan, Meadville, Pa	Chaut.
City Government, New York	City Govt.
Contemporary Review, London	Contemp.
Cosmopolitan, New York	Cosmopol.
Dial, Chicago	Dial.
Dublin Review, London	Dub. R.
Eclectic Magazine, New York	Ecl. M.
Economic Journal, London	Econ. J.
Economic Review, London	Econ. R.
Edinburgh Review, Edinburgh	Ed. R.
Educational Review, New York	Educa. R.
Electrical Engineer, New York	Elec. Eng.
Electrical Review, New York	Elec. Rev.
Electrical World, New York	Elec. World.
Engineering Magazine, New York	Engin. M.
Engineering News, New York	Engin. News.
Engineering Record, New York	Engin. Rec.
Fire and Water, New York	Fire and Water.

Fortnightly Review, London	Fortn.
Forum, New York	Forum.
Garden and Forest, New York	Garden & F.
Good Government, Washington, D. C.	Good Govt.
Harper's Magazine, New York	Harper.
Harper's Weekly, New York	Hrprs. Wkly.
International Review, New York	Internat. R.
Johns Hopkins University Studies in History, etc., Baltimore, Maryland	J. H. Univ. Studies.
Journal of the Association of Engineering Societies, Philadelphia	J. Assoc. Engin. Soc.
Journal of the Franklin Institute, Philadelphia	J. Frankl. Inst.
Journal of Political Economy, Chicago	J. Pol. Econ.
Journal of the Statistical Society, London	J. Statis. Soc.
Leslie's Weekly, New York	Leslie's Wkly.
Library Journal, New York	Lib. J.
Lippincott's Magazine, Philadelphia	Lippinc.
Longman's Magazine, London	Longm.
Macmillan's Magazine, London	Macmil.
McClure's Magazine, New York	McClure's.
Municipal Engineering, Indianapolis, Indiana	Mun. Engin.
Municipality and County, Buffalo, N. Y.	M. & C.
Munsey's Magazine, New York	Munsey's.
Nation, New York	Nation.
National Review, London	National.
New England Magazine, Boston	New Eng. M.
New Review, London	New R.
Nineteenth Century, London	19th Cent.
North American Review, New York	No. Am.
Open Court, Chicago	Open Court.
Our Day, Boston	Our Day.
Outlook, New York	Outlook.
Overland Monthly, San Francisco, Cal.	Overland.
Political Science Quarterly, New York	Pol. Sci. Q.
Popular Science Monthly, New York	Pop. Sci. Mo.
Proportional Representation Review, Chicago	Pro. Rep. Rev.
Public Opinion, New York	Pub. Opin.
Quarterly Journal of Economics, Cambridge, Mass.	Q. J. Econ.
Quarterly Review, London	Quar.
Railroad Gazette, New York	Railroad Gaz.
Real Estate Record and Guide, New York	Real Estate Rec. & G.
Review of Reviews, New York	R. of Rs.
Revue des deux Mondes, Paris	Rev. d. deux Mondes.
Revue des Revues, Paris	R. des Revues.
Revue Bleu, Paris	Rev. Bleu.
Sanitarian, Brooklyn	Sanitarian.
Sanitary Record, London	San. Rec.
Saturday Review, London	Sat. R.
Scientific American, New York	Sci. Am.
Scientific American Supplement, New York	Sci. Am. Sup.
Scribner's Magazine, New York	Scrib. M.
Social Economist, New York	Soc. Econ.
Spectator, London	Spec.
Street Railway Journal, New York	St. Ry. Jour.
Street Railway Review, Chicago	St. Ry. Rev.
Transactions of the American Society of Civil Engineers, New York	Trans. Am. Soc. Civ. Engrs.
Van Nostrand's Engineering Magazine, New York	Van Nos. Eng. M.
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BIOGRAPHICAL NOTICES

OF THE

WRITERS IN MUNICIPAL AFFAIRS FOR JUNE, 1897.

EDWARD M. GROUT. Born in New York City, Oct. 27th, 1861. Educated in the public schools of New York and Brooklyn and at Colgate University, from which he graduated with the class of 1884. Is now alumni trustee of that institution. Studied law in General Woodford's office, and on Jan. 1st, 1898, entered into partnership with Judge Wm. J. Gaynor. In 1892, Mr. Grout began the contest before the Aldermen of Brooklyn to compel the exaction of the best possible price for street railroad franchises which, with Mr. Gaynor, he afterwards took into the Courts and continued after the latter's election as Supreme Court Justice, in 1898. As a result no franchise grant in Brooklyn has since become effective unless compensation was exacted. Mr. Grout had charge of Mr. Gaynor's campaign and was an active and prominent figure at Gravesend on election day 1893, and afterwards in the McKane prosecutions. Nominated for Mayor of Brooklyn by the Democrats in 1895, defeated, but reduced the Republican majority of 1893 from over 33,000 to 2,000. In Nov. 1896, he called attention of Greater New York Charter Commission to fact that the first draft of new Charter omitted any provision for municipal ownership of franchises. Afterwards urged Commission to adopt more radical provision than that quoted in his article. Has been actively engaged since November last in speaking and writing in favor of municipal ownership. Delivered an address on this subject before the Reform Club, Feb. 13th, 1897.

ALLEN RIPLEY FOOTE. Born at Olcott, Niagara Co., New York, Jan. 26th, 1842. Enlisted as a private in the Third Michigan Infantry in answer to call for three month's volunteers on the breaking out of the civil war. Served in the battles of Williamsport, Bull Run, Siege of Yorktown; shot through the right lung at Fair Oaks, and was discharged on account of wound. On his recovery he reenlisted and served as second lieutenant in the Army of the Commonwealth until the close of the war. Secretary of the National Electric Light Association for one year. Employed three years by the Eleventh Census Bureau as an expert in statistics of the electrical industries. Published in 1889, "The Economic Value of Electric Light and Power"; in 1892, "The Law of Incorporated Companies operating under Municipal Franchises." (Three volumes.) Is a life member of the American Economic Association.

CLINTON ROGERS WOODRUFF. Born Dec. 17th, 1868, of a long Philadelphia ancestry. Graduated with first honors from the Central High School and from the Collegiate Department of the University of Pennsylvania; also studied law and graduated from the Law Department of the University of Pennsylvania. Was treasurer and secretary of the Philadelphia Municipal League from 1891 to 1897 and is now its counsel. Is also secretary

of the National Municipal League and of the Pennsylvania Ballot Reform Association. Has just been elected secretary of the Public Education Association, succeeding Judge W. W. Wiltbank. Is a member of the Executive Council of the Pennsylvania Civil Service Reform Association, trustee of the American Institute of Civics and vice-president of the American Humane Union. Mr. Woodruff is a member of the Pennsylvania legislature, session of 1897, and has been appointed to two of its most important Committees, those on the Judiciary and General and Municipal Corporations. Although engaged in the active practice of law in Philadelphia, Mr. Woodruff is a frequent contributor to the leading magazines and newspapers.

DR. LEO S. ROWE. Born at McGregor, Iowa, September 17, 1871. Attended the Philadelphia public schools, graduating from the High School with the degree of A. B. in 1886. Entered the University of Pennsylvania receiving from that institution the degree of Ph. B. in 1890. From 1890 to 1892 he held a Wharton School Fellowship in Political Science. Pursued university studies at Halle (1890), Paris (1890–91), Berlin (1891–92), Vienna (1892), and Rome (1893). In 1892 he received the degree of Ph. D. from the University of Halle. Dr. Rowe's work abroad was devoted chiefly to the subject of municipal government, and during the year 1893–94 he delivered a series of lectures upon that topic in the University of Pennsylvania. He is a member of the Staatswissenschaftliche Verein of Berlin and *correspondant* of the Société d'Économie sociale and of the Société d'Anthropologie of Paris. He is also a member of the American Economic Association and a Councilor of the American Academy of Political and Social Science. Dr. Rowe was appointed lecturer upon municipal government in the Wharton School of Finance and Economy, U. of P. in 1894, and in 1896 was made Assistant Professor of Political Science. Of his published works the following relate to municipal topics:

"*Die Gemeindefinanzen von Berlin und Paris.*" Jena, 1893. pp. 236;
"*Betterment Clause of the London Improvement Bill.*" ANNALS, Vol. IV, November, 1893;
"*City Government as it Should Be and May Become.*" Proceedings Conference for Good City Government, Philadelphia, 1894;
"*Reform in Municipal Government.*" Boston, 1894;
Articles, "*Municipality in Prussia*" and "*Municipality in Pennsylvania,*" in Palgrave's "Dictionary of Political Economy."

HENRY DEFOREST BALDWIN. Born at Clinton, Iowa, November 7, 1862, brought up in New York City, was graduated from Yale College in 1885, and from Columbia Law School in 1887. Studied in Berlin and Heidelberg for a year and has since practiced law in New York City. Appointed assistant to the Counsel to the Corporation of New York City in 1895. Mr. Baldwin has been an active member of the Tariff Reform, Sound Currency and other Committees of the Reform Club, and was the secretary of the Club and a member of its Board of Trustees from 1893 to 1897.

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MUNICIPAL AFFAIRS.

VOL. I. SEPTEMBER, 1897. No. 3.

SHOULD GREATER NEW YORK OPERATE ITS STREET RAILWAYS? YES.

JOHN DEWITT WARNER.

It is not here proposed to insist that private ownership and operation of street railways has been everywhere an unmixed evil; or that up to date it has been such on the whole; or that under conditions which prevail in many cities, municipal Control, as distinguished from Operation, of such franchises, is not as far as at present the municipality should go.

This discussion has reference primarily to conditions here (at New York). And even here, the question is not as to whether New York should at once exclusively operate all street railways within her borders. It is with the present and for the future that we have to deal. The present is too complex and too deeply rooted in the past to permit of aught but evolution. This, in the very nature of things, must be deliberate. Nor is it proposed here to suggest a program.

However conservative and considerate the rate at which progress shall be made, it is, nevertheless, of the utmost importance that we rightly judge the end ultimately to be reached. If we do this, then every step taken, having in view that end, will be a practical advance toward it. If, however, we fail to recognize the dominant tendencies of our time, our essays at progress will prove so many wanderings, each of which will simply leave us just so many more steps to be retraced. We can afford most

considerately to pursue that course which shall, on the whole, be most advantageous; we cannot afford to waste our energies in continuing a wrong one.

Of the questions originally involved, more than one has already been so solved as to clear the way for our contention. It is now so generally admitted that a municipality should control the operation of public franchises within its territory, that this question need not be raised here. The old, typical monopolies, as they were granted under the Stuarts and earlier sovereigns, are no longer defended, except as arbitrary expedients by which trade or transport were regulated (or obstructed) in communities so backward as to be incapable of more enlightened methods.

As to intra-mural service in especial, this has so universally come to be recognized as a natural use of lands already dedicated to the public, or to be acquired by the public for that purpose, that in this regard public control is conceded to be peculiarly appropriate and discussion practically foreclosed from the outset.

On the question, however, of public Operation, as well as control, not merely is there no such approach to unanimity, but current assumptions here—which are so large a factor of opinion on public questions—have been, perhaps are yet, most largely in the negative.

Given the ownership of property by the public for public use, it naturally follows that the public, as such, should presumably perform, by itself in the aggregate, every function required to facilitate that use by the public at large. Legitimately, therefore, it is those who favor delegation of this duty to individuals upon whom lies the burden of first supporting their claim. It is, however, proposed to anticipate and meet the questions most frequently raised against Municipal Operation of street railways, or, more generally speaking, of intra-mural transport facilities.

No point is here made of the illegality or impropriety of delegating governmental powers. In the first place, this question is rather one of degree than principle; since in any case government must act through agents; and, given mediæval conditions, even the farming of taxes may have been as proper as here and now it would be outrageous. Moreover, no one now defends the avowed delegation to individuals of government powers; and to insist

on this argument would be too much like setting up a man of straw for the pleasure of knocking him down.

Nor will it be attempted here to draw distinctions between the respective functions of city, state and nation. As to the nation, it will be admitted that it is not concerned; and as to the state, it is not attempted to argue here how far it should act directly, or to what extent it should deputize the municipalities within it. The writer's assumption, however, is that any function, to be exercised by the public at all in this matter, should be so exercised by the municipality whose inhabitants are most directly interested.

As commonly stated, the objections against Municipal Operation are four:—

1st: That the Public, through the municipality, cannot Legally undertake such operation.

2nd: That, even if Legal, this would be Socialistic and against the policy of our institutions.

3rd: That it would be Politically Demoralizing.

4th: That, as compared with private management, Municipal Operation is economically Wasteful.

As to the Legality of Municipal Operation.

This issue is still made; but it has been so thoroughly settled in favor of Municipal Operation that authorities rather than argument will be dwelt upon here. Not to mention precedents elsewhere—in Great Britain and on the Continent of Europe—the steadily increasing extent to which American, and especially New York municipalities, and particularly New York City itself, have successfully undertaken the operation of public franchises, including the supply of water and light (as to which see below), the recognition by sister states of the propriety of Municipal Operation of all local franchises (1), and the committal of the federal courts to the general legality of municipal supply of transport facilities (2), we have in our own state, as indicating its

(1) *e. g.* An Indiana statute authorizes the boards of public works of cities "to "purchase or erect by contract or otherwise; *and operate* water works, gas works, "electric light works, street car and other lines for the convenience of passengers and "freight, natural gas lines, telegraph and telephone lines, steam and power house lines, "for the purpose of supplying such city, or the suburbs thereof * * *."

(2) "Unquestionably the legislature may authorize a city to furnish light, *the facil-* "*ities for transportation*, or water to its citizens, *with or without cost* as the legisla- ture or city may determine."—Fellows *vs.* Walker, 39 Federal Reporter, 651.

general policy, not merely our village Act of 1894, authorizing any village in the state to furnish its citizens with water and light (gas, electric or otherwise), to acquire for public operation any plants already built by private parties and to incur indebtedness therefor on the credit of such village; but upon the precise point of city operation of transport facilities, such copious and recent legislation and adjudication as thoroughly to settle all possible question in this connection.

By Chapter 300 of the Laws of 1875, the bridge (about a mile between terminals) between New York and Brooklyn was declared to be "a public work to be constructed by the two cities "for the accommodation, convenience and safe travel of the in- "habitants of the said district (the aggregate area of the two "cities)," the expense of constructing and maintaining which should be a charge upon such cities; and the trustees representing such cities, in the management of the bridge, were expressly authorized "*to operate or cause to be operated a railroad or rail-* "*roads over said bridge.*" Under this the two cities have, in fact, for many years successfully operated a cable street railway over the New York and Brooklyn Bridge.

By Chapter 532 of the Laws of 1892, the Park Commissioners of any city of the first class in New York State were authorized to construct railways across public parks, on depressed ways within said parks and on the surface of streets outside, to connect with other street railways, to make contracts for their construction, equipment and running, upon conditions and at rates of fare to be fixed by such commissioners, the act expressly providing, (Sec. 3:)

"Whenever any railroad shall be constructed, equipped or "operated under this act, the expense of such construction, "equipment and operation shall be paid by the Municipal Cor- "poration, within which such railroads are situated, in the same "manner as the other expenses of such Municipal Corporation "are paid and provided for."

And finally, during the current year (1897), under the stringent provisions of our New York State Constitution, which limits municipal expenditure to "city purposes," the constitutionality of our City Rapid Transit Act of 1891, as amended in 1894, has been affirmed by our highest court (Sun Publishing Ass'n

vs. Mayor, etc., 152 N. Y., 257). In this case a peculiarly full discussion was had of the principles involved, and the opinion of the Appellate Division of the Supreme Court, written by Mr. Justice Barrett (8 App. Div., 230), discusses fully the essential points here involved, and states and adopts the general principles contended for here. So far as concerns operation, as distinguished from control, he assumes direct municipal operation to be the normal method, and defends the legality of the permission to operate by lessees, on the ground that the method of operation is only incidental to the essential duty of the city—to provide the means for rapid transit. (3)

(3) * * "Cities are not limited to providing for the strict necessities of their "citizens. Under legislative authority, they may minister to policing the city, to paving its streets, to providing it with light, water, sewers, docks and markets. They "may also be required by the sovereign power to furnish their citizens with schools, "hospitals, dispensaries, parks, libraries and museums, with zoological, botanical and "other gardens. They may thus even gratify our ears with music of a summer afternoon, or minister to our comfort by providing us with public baths. Expenditures "in all these directions under legislative authority have never been questioned. "Where, then, shall we draw the line? It would be very simple to draw it at those "purposes for which precedent in the past can be found, and to exclude all others. "This test should be easy of application, but would be essentially vicious and erroneous. Growth and extension are as necessary in the domain of municipal action as "in the domain of law. New conditions constantly arise, which confront the legislature with new problems. As the structure of society grows more complex, needs "spring up which never existed before. * * * To hold that the Legislature of this "State, acting as the *parens patriæ*, may employ for the relief or welfare of the inhabitants of the cities of the State only those methods and agencies which have "proved adequate in the past, would be a narrow and dangerous interpretation "to put upon the fundamental law. No such interpretation has thus far been placed "upon the organic law by the Courts of this state (236).

"The true test is that which requires that the work shall be essentially public and "for the general good of all the inhabitants of the city. * * * Within that sphere of "action, novelty should impose no veto. *Should some inventive genius by and by create a "system for supplying us with pure air, will the representatives of the people be powerless "to utilize it in the great cities of the State, however extreme the want and dangerous the "delay? Will it then be said that pure air is not as important as pure water and clear "light? We apprehend not.*

"The health of the people is dependent in a measure upon decent and convenient "transit between their homes and their places of business; not in as great a degree as "upon light, air and water, but in no inconsiderable degree. The scheme under "consideration is intended to supply not only rapid, but decent and convenient "transit; to ameliorate the present congestion, which at certain hours of each day is "fraught with danger to thousands, and to furnish business men and women with the "means of reaching their homes at such hours without being crushed in body or worn "in nerve. * * * The sole object was public and general locomotion in the locality—"locomotion for which there was a crying need—safe, rapid, healthful locomotion; "locomotion worthy, in fine, of a civilized metropolis and of a well-governed municipality (288–289).

"It is proper, however, that we should briefly notice another view of it which the "appellants, in their point with regard to local self-government, impliedly present, "namely, that a city purpose presupposes immediate municipal control, and that there "can be no city purpose without actual and direct corporate possession, control and use. "This is the first time it has ever, to our knowledge, been suggested that the city pur-

Municipal Operation is not Socialistic.

It will not suffice simply to brand as Socialistic the proposed extension of the function of the city to serve its citizens. In the sense in which the word must be used to fit such a case as this, all government is socialistic; and municipal, government peculiarly so.

The actual dependence of man upon man, as a condition of civilization has, in this sense, laid socialism as the cornerstone of society; and in proportion as civilization develops, it ever builds onward and upward with material from the same quarry. As the world grows better and more comfortable, this is always, in great measure accomplished by steadily increasing the extent to which, with less of effort or sacrifice to him than it would otherwise have cost him unaided to do it, society—the nation, the state and the city—does for each what, in any case, he would wish to have done. Here is the criterion: Socialism and Communism are objectionable in that they assume to direct the energies of individuals in behalf of the common weal. Civilization, on the other hand, uses the common purse to give more freedom and opportunity to each to follow his chosen bent. The essential of socialism and communism is, that, in the attempt to enforce a common level of happiness the individual is restrained. Of civilization restraint is but an incident, and justifiable only so far as necessary to protect each in the use he chooses to make of the enlarged freedom, which it is the glory of civilization to have given him.

It is in the increasing extent to which, as men gather in households, villages and cities, the strictest business considera-

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" pose referred to in the Constitution relates to the method of doing a thing rather than " to the thing itself (241–242).

" Still less is this question embarrassed by the terms of the act with regard to the " construction and operation of the road. It is quite immaterial, so far as the question " of city purpose is concerned, whether the road shall be built in one way or in another. " or operated in one way or in another. The material fact is, that the road (Sec. 63) " ' shall be and remain the absolute property of the city so constructing it or them, and " ' shall be and be deemed to be a part of the public streets and highways of said city, " ' to be used and enjoyed by the public upon the payment of such fares and tolls, and " ' subject to such reasonable rules and regulations as may be imposed and provided for " ' by the Board of Rapid Transit Commissioners in said city.' " (Laws of 1891, Chap. 4, as amended by Laws of 1894, Chap. 752, Sec. 9, adding Sec. 63.)

" How this latter provision shall be effectuated, whether by a long lease or a short " lease, by a lease with this covenant or that covenant, by a lease with or without pro- " vision for renewal, by an individual lessee or a corporate lessee, *or by no lease at all, " but simply by direct municipal service* are mere matters of detail." (244.)

tions continually add to the variety and extent of the service which the municipality, as their common agent, can profitably render, that is found the open secret of the growth, along lines of the sharpest individualism, of municipal organization more complex and more beneficent than, at a less advanced stage, the most unbridled socialism could have imagined. To the sparsely settled moors of old Britain it would have been folly to have furnished roads, but between first the larger towns and then the smaller villages were established the King's highways. And it was long after they were defined before, in general, they were worked or paved. The granting of franchises to stage and tramway lines followed later in the attempt to meet economically the growing wants of a denser population. Our cable roads and our elevated structures are but different developments of this same principle, as will be our use of rapid transit subways in the near future; while bridges and ferries are but extension of the same function — that of maintaining open highways for the use of all the people. To what extent the city shall go is measured by the practical question of how our highways can be made adequate for their uses in the face of a population steadily increasing in density, and under conditions of locality and building construction which exaggerate all former experience. If, with our towering buildings, crowding each other along our thoroughfares, the gravitation of New York's great commerce brings into our present streets more of people than, under present conditions, they can accommodate, it will then be the duty of the municipality to devise means by which their capacity shall be increased. How this shall be attained—whether by opening new thoroughfares, or by using additional or novel means of transport, or by offering such convenience, speed and economy in certain directions as shall relieve the pressure upon alternatives not thus favored—All these are strictly business considerations. Their solution is included within the old common law duty of keeping open the King's highway.(4) And if there is one thing more conducive than all others to the

(4) At the meeting of the London County Council July 27th, 1897, notice was given of the report of a committee to which had been referred among other matters "the restoring to the Thames its old service as a highway"; whereupon Earl Russell gave notice of motion "That the present river service is inefficient and that the committee be instructed to prepare a scheme for municipal river service."

freedom of the individual, and in which that freedom is most essential to the welfare of the city and state it is the highest possible development of transit and transport facilities. (5)

No Political Danger would be Involved.

The objection which is, perhaps, most stringently urged of all, to the Municipal Operation of franchises, is the Political Demoralization which, it is assumed, would be consequent upon such an extension of the civil service of the municipality, were street railway franchises included among those thus to be operated.

The number of those dependent upon the government for employment would be correspondingly enlarged—this much is certain; and increased dependence of citizens upon municipal employment is not in itself to be encouraged. If, however, this is but an incident of something which is essential to the public weal, then to refuse to proceed because of the dependence thus encouraged would be to strain at a gnat while swallowing camels. And, looking at the matter from the standpoint of the employee, can it be for a moment claimed that public service, under ordinary conditions, is more dangerous to manhood, more productive of dependence, than is that of the great corporations that now operate our public franchises?

It will be urged, however, that the standpoint of the public is that from which this question should be stated. Granted; but what has our experience shown? If our present postal facilities were furnished by private corporations, and if, before the experiment had been tried, we were asked to name, of all branches of possible public service, that in which favoritism by the Government would be at once most possible and most to be deprecated; where Government meddling would be most likely and most intolerable; where the number of employees must be such, and the

(5) "From a polyp up to man the increasing perfection of the circulating system marks the increasing activity of life, the more perfect interdependence of the various parts of the organization, a wider range of sympathies, and an increasing ability to dominate natural surroundings. From the savage who lives without any interest in the rest of the world, confined to his own horde, and wandering through the trackless forests, up to the present condition of society, with its iron roads, like arteries carrying the material for social life where it is called for, and with its telegraphs extending like a network of nerves, bearing prompt intelligence to the centres of all that affects the parts, the history of the increasing perfection of the means of transportation and of communication, is the history of all human advancement."—The Future of the Railways in the United States. *Westminster Review*, January, 1871, p. 68.

necessity of discipline and method such, as most to develop bureaucracy and most to demoralize the voters, we would name the postal service, and say that the carriage of the private messages of our citizens was the last function to be undertaken by the Government of a free people. In short, the Post Office is just *the* department of public service where the dangers of public control are theoretically the greatest. It will, however, be admitted that in fact our liberty has been rather enlarged than restricted by our government postal service, and that the army of postal employees constitutes neither a servile class nor a demoralizing factor in our politics. Nay, more; it will be conceded that there is not a more self-respecting, harder working body of men in the country, or one that better earns the wages it gets, or which is better regarded, or which better deserves the repute it has, or one which is a more effective ally of ideal civil service methods than is the postal force. And there are reasons for this.

As Antaeus ever gained vigor from the touch of the soil, so personal and political manhood needs renewal by constant touch with the masses of our people. To organize and create a municipal bureau, self-contained and little understood by the public at large, such as that of the Sheriff's or County Clerk's office here, is to take a dangerous, however necessary, risk of bureaucracy and machine politics. To do this in one locality for the whole country is to make this risk so extra hazardous that the solution in the case of Washington of disfranchising the city, and treating it as a satrapy, was probably the only adequate one there. But when the conditions are so changed as to leave each public servant to do his work in close relations to the mass of his fellow-citizens, mutual contact and mutual criticism establish mutual respect and mutual co-operation, at once toward effective public service and enlightened politics.

And in the case of the street railway force the conditions are not merely such as to class it with the postal employees rather than with such a clerical hive as was the Census Bureau, but such as to make it less dangerous than is the case even with the postal service.

Nor is it from this standpoint alone that certain branches of administration practically compel efficient

business methods. In a government bureau or in a local clerical office it is entirely possible so to load the service with sinecures or inefficients as to rob the public, without material interference with the orderly conduct of the public business, or any betrayal to the public at large of the extent to which it is being swindled, and its service used as barracks for political Hessians. But in the case of street car employees, the great majority are so engaged as to make it practically out of the question that inefficiency should not be seen and noted of all; while the normal day's work that a man should do, and the normal proportion of clerical to outside force, has been so far established by experience as to guarantee, so far as this is possible to be done, the effective administration of municipal street railways, carried on as they must be under such extreme conditions of public knowledge, appreciation and criticism.

To the writer the increase of patronage involved in the proposed extension of public service was, for years, a bugaboo; but upon study it seems to offer decided advantages in the very cases where it seemed most formidable. The most serious experiments possible are those which have already been tried; and their success is an invitation rather than a warning.

Municipal Operation is Economically Sound.

To this proposition objections are raised from various quarters. Of these the most blunt and formidable is, perhaps, this: That any attempt to acquire the franchises already held by private parties would involve an expense so far beyond the ability of the municipality to provide for it as to make it clearly impracticable. In this connection it is pointed out that, no matter how little may have been the actual expenditure now represented by the stock and obligations of the companies who claim vested rights in the streets, their quoted value is but a hint of the enormously larger sum which must be awarded them upon any appraisal of the worth of a monopoly of transport facilities in a community already so great, and with a promise of such wonderful growth through long generations to come, as is the Greater New York. In its ultimate analysis, the argument comes to this, that the rights of the public in this city were so extraordinary a proportion of its total wealth, and have been in so large measure deeded away,

that to repurchase them would hopelessly burden the remnant of property left.

As to the first part of the proposition, it must be conceded to be true. It is the very fact that our locality enjoys to an extraordinary extent the natural advantages which our law considers public rather than private, and that—by our charters, the acts of our legislature, and the purchases and improvements made from taxation—our normally public property has become of extraordinary value, even as compared with the almost measureless wealth of our private possessions, that determine the character of New York as the metropolis of a continent. Even excluding our harbor and tidal rivers as the property of the national government, it is probable that any fair inventory of our public possessions, including our streets, would show an aggregate of nearly one-third of the wealth represented by all that is built and stored upon Manhattan Island and in adjacent localities. And it is also true that of this enormous aggregate of public wealth, our street railway franchises are a large and increasing proportion.

It does not follow, however, that those who claim to own them have a good title to all that they claim.

In the first place, our government is one of limited powers, and is incompetent either to grant away essentials of sovereignty or irrevocably to delegate the exercise of government powers. More than this—all law questions aside—it is ridiculous to imagine either that this generation, on a matter of public weal, will consider itself bound by a past one, or to expect that future generations will respect this once dead hand. If, therefore, public control of public franchises is right, then it is inevitable, and recognition of this and prompt preparation for it the only sensible policy.

In this view, the main question to be discussed is, as to what, if any, consideration for, or compensation to, private individuals should be conceded. As to this, the question is not of the worth of a right perpetually to usurp public rights and functions, but as to what, without involving undue public burdens on the one hand, or unnecessary hardship on the other, shall be conceded to those, who, in the main in good faith, now consider themselves the owners of these franchises.

That is to say, the proper compensation to private so-called owners

of a street railway franchise, though it be in terms perpetual, is not what would be the worth of such a franchise, could it exist. However innocent may be such owners, the public is equally so, and, in adjustment between it and individuals, there is no reason why all sacrifice should be at the expense of the common weal.

The real question, therefore, in each case, is reduced to an inquiry as to what, as between two innocent parties, is fair. In actual adjustment most of us, in cases of doubt, would probably lean toward liberal treatment of those against whom the public asserts its rights; but the fact is that any compensation made to so-called owners is not a matter of absolute right—the right and duty of the public to exercise its franchises coming first—but rather of concession by the public of what (within what it can afford) it sees fit to make to those against whom it asserts its own paramount right. Its first duty is to serve the people. If it can afford to relieve others from all hardship which it may cause them by doing its duty, well and good; if it cannot, then private interest and not the public welfare must give way. In time of war we take the flesh and blood of the country, and set it up to be shot at, in the service of the state. In case of equal necessity, dollars are no more sacred from conscription in time of peace. Doubtless the public can and will deal liberally with the private interests affected. These latter, however, may as well appreciate that what the city can afford to do for them is of minor importance compared with what it must do for its people. And most of us will live to see the time when the idea that a private right to exercise public franchises can exist will be considered an exploded heresy, and will be so treated by the courts.

To claim that the value of the public interests thus sacrificed is so far beyond the ability of the public to repurchase them that they can never be retaken, is therefore not so much to argue that they should not be retaken, as to demonstrate the weakness of the title by which they are held, and the fatal illegality of the action by which any public officials whatever, trustees for the public, have misdealt with the subject of their trusts. (*)

(*) Doubtless the change will be resisted by the companies who have so long abused the public patience; but it is proper here to say that these companies have acquired and can acquire no rights against the public which are not subject to the general police power that is inherent in society. I am aware that companies holding public grants

We are, however, told that, even were the public the present owner of our street railway franchises, together with the plant to operate them, it would then be wasteful, from the point of cost alone, for the city to undertake to operate them itself. And we are faced at the outset by suggestions of the extra expense and waste involved in official as distinguished from private administration; by statements of the complex business problems constantly arising in street railway development and administration, and by tabulated statistics summarizing a wide experience. These demonstrate, by the wrecks and weather-beaten hulks that are so numerous, how perilous is the sea of troubles on which street railway enterprises are launched, how sleepless the vigilance that stands between success and failure, and—inferentially—how disastrous would have been the financial results if municipal operation had been substituted for the watchful care of private interests. I must admit that no such array of figures can be marshalled against these. They represent what, until lately, was the whole field of experience. Intra-mural transport, until lately, has been so engrossed by private interests that there is scarcely other experience broad enough to be properly called such. But it is for the future that we are planning; and it is upon the very fact that developing conditions are more

claim to have vested rights; but there are no such things as vested rights which can interfere with the power of the community to do those things which are essential for its growth, its safety and its progress in civilization. Improvident grants have been made; but, when they come in contact with the superior rights of the people, indemnity may be claimed and awarded, but their existence cannot be pleaded as a bar to improvement. This proposition is true not only of those companies which have their works under the streets, but of all companies which occupy them for any purpose whatever. The only theory upon which the rights of private corporations to use the public streets has ever been justified, is that they give greater facilities to the purpose for which the streets were created.

But the right of the city to require the streets to be used in such manner as will from time to time promote the general convenience of the community, is unquestionable. A rail that would be a suitable one to-day may be unsuitable to-morrow, and experience may develop a better means of transportation through the streets, and the rights which private parties may have acquired cannot be urged as a bar to the exercise of the inherent and superior rights of the people. To take an extreme case, several of the leading avenues of the city are occupied by elevated railway structures. They are found to be indispensible at this time for the wants of the public. If, at some future time, a better means of transportation should be found, there can be no doubt that these companies could be required to adopt it, or if it should become necessary, they could be compelled to remove their structures from the streets altogether. The question of indemnity and compensation would be one for the courts to settle; but there can be no doubt whatever that, if in the course of progress and of invention the community should require a better means of transport then devised, it would be justified and have the undoubted power to make the changes thus required. *Salus populi suprema lex.—Message of Hon. Abram S. Hewitt, Mayor, to the Board of Aldermen*, 1888.

favorable to municipal operation than those which have maintained in the past that we largely depend for escape from the pitfalls wherein many have fallen and which others have so narrowly avoided. It is just because these statistics include the experimental stages in small cities, apparently backward in growth, that we distrust their bearing upon the problem of municipal operation, when attacked in the light of the experience for which they have paid, and under novel conditions so favorable to success.

Conservatism is always desirable; but so honorable a name can scarcely be applied to the theory that municipal operation, now inaugurated, will not have material advantages over existing private corporations—with their heritage of burdens (miscalled capital), representing funds sunk in experiment, lavished in purchase of "influence," and swamped by the water on which dividend pledges are to be kept afloat. (7)

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(7) The following needs no comment:

"The present earning capacity of the railways now consolidated by the Union Traction Company is shown by the following table, which gives the figures for the year ending June 30, 1896. The figures quoted cover companies which operate nearly 95 per cent. of the railway mileage of Philadelphia.

Companies.	Gross Earnings.	Operating Expenses.	Net Earnings.	Cost of road and equipment.
Electric Traction	$2,496,164	$1,270,008	$1,225,956	$7,787,718
People's Traction.....	2,035,082	1,084,892	950,190	6,880,425
Philadelphia Traction. ..	5,678,780	3,007,926	2,670,854	19,538,378
	$10,210,026	$5,363,026	$4,847,000	$34,156,516

A glance at these figures shows that the present earning power of the Philadelphia companies is large. With the longest lines of any surface system in the country, the gross receipts per mile of track are above $24,000. This return on the basis of track mileage is exceeded by only four of the seventeen surface systems of this country which operate 100 miles or more of track.

Companies.	Miles of Track.	Total Capitalization.	Capitalization per mile.
Third Ave. Co., New York.....	28	$14,000,000	$493,000.
Capital Traction Co. Washington, D. C.....	36	12,000,000	333,300.
Metropolitan Co., N. Y..	189	54,884,000	280,900.
Union Co., Philadelphia.....	447	108,301,800	242,200.

But even with this large earning capacity, the present organization of the railways is maintained with difficulty because of the heavy overcapitalization of the system. The capitalization of the Union Traction Company and constituent companies is estimated as follows:

The most that can be claimed is that, given the power to exercise the right of eminent domain, private administration might prove more economical. Though not conceded, this might be true, and yet not be conclusive in favor of private operation.

For the question is not how much the managers of street railways might gain for themselves and their promoters, but how much they would actually save the public, in giving good service at cheap rates. As to this, not merely is there no evidence that the public would get special benefits from their economy, but the precedents are overwhelmingly the other way. Take the whole history of transportation enterprises in this country, and in especial those which have been favored by public aid—with their broken pledges, watered stock, thimble-rigged accounts, construction rings, stock jobbing scandals, disregard and defiance of public interests. The story is almost uniformly one of bad faith to the public until it has taken them by the throat; of such extortionate misuse of the agency for the public with which they have been entrusted that, as has been well said, long distance freights, and palace, sleeping and dining car rates are the only ones which are as low as they should be, or as, from an enlightened standpoint, it would be profitable to the railroads to make them; while the holders of free passes are, as a class, the travelers most generously treated.

It may be stated that this is a consequence of economic errors —the issue of bonds at bonus rates; of stock non-existent except as a basis of speculation; mad rivalry in legislative and judicial corruption, which is as senseless from the standpoint of the

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Constituent Companies.		
Capital Stock	$57,891,200	
Funded Debt	11,675,600	
Union Traction Co.		
Capital Stock	30,000,000	
Collateral Trust, 4's	29,735,000	
		$129,301,800
Less stock in trust		21,000,000
Total net capitalization		108,301,800

Thus the 447 miles of track of the Union Traction Company are capitalized at $242,280 per mile. The cost of construction and equipment, including paving of the streets occupied by the tracks, as reported by the companies, is $76,400 per mile of track. The lines are thus capitalized at more than three times their reported cost of construction and equipment. *The Street Railway System of Philadelphia*, Speirs, pp. 46-8.

corporation involved as it is hostile to the public interest; duplication of already adequate facilities; loss in competition on long distance rates that must be made up from other traffic; profitless quarrels in which competitors mutually assume a dog in the manger attitude; lack of co-operation that leaves the facilities controlled by each crippled for lack of proper connections—and that each of these is remediable.

But does not our experience show that these and other defects are peculiarly characteristic of private street railway enterprises rather than casual drawbacks to them? With the exception of the one street railway that is jointly operated by the municipalities of New York and Brooklyn, are not the fares on the numerous, crowded cross-town lines, where the normal travel is for short distances only, kept at an extortionate rate, while for no greater charge, fifteen or twenty mile exchange routes are elsewhere operated? Are there anywhere instances of more purely speculative issues of stock than have characterized most of our street railway corporations? Were the teachings of the Pacific Railroad deals and the early New Jersey railroad bribery not worsened by the Broadway franchise scandals, the Cleveland Cumulative street railway Franchise Leases and the Chicago Street Railway Combine? Is not the mutual jealousy of street railway corporations written in the gridironing by duplicate tracks, that practically destroys for other purposes so many of our most eligible streets? Was there ever a more disgusting squabble at the expense of the public convenience than that which, for years, has been carried on between the Metropolitan and Third avenue systems here? Was there ever a more idiotic resultant of warring astuteness than the miscalled "connections" that, for so many years, we have had at the Brooklyn Bridge and the Harlem river? Is it not true that these faults, indefensible as they may be, are but expedients into which the conditions of corporation rivalry have driven gentlemen who have neither wantonly chosen the course they have followed, nor are likely to abandon it in any philanthropic effort to cure conditions by which they have profited? And do not our coolest observers agree in charging to street railway companies the worst of the political corruption that has made

American municipal government a hissing and a by-word in political literature? (8)

One remedy has been suggested—and has apparently been attempted here—the combination of existing corporations into a single railway that shall cover the city. Do the advocates of private operation seriously adopt this as their panacea? That conditions of service would be an improvement upon the immediate past, I assume. But in view of developments during the past ten years—the past five years in especial—does any one propose that this city be bound hand and foot for a long term by any conditions as to method, quality and rate of transport which could now be definitely exacted and would be accepted by the octupus? Does any one claim that the managers would not devote their energy and talent to the gain of their promoters at the expense of the public? Has any one who shrinks from the political danger of Municipal Operation calculated how much more far reaching

(8) "Nor must we forget that the plan of leaving the function to private corporate companies is open to evils scarcely less patent than those which flow from dishonest management, because these companies when they prosper and grow large bring their wealth to bear upon the municipal authorities, and have even been known to scatter bribes widely among the voters for the sake of retaining or extending their monopoly. It is not the least among the many mischiefs entailed by the pollution of city governments that citizens who resent the high prices charged and poor supply given by private companies often prefer to bear these hardships and to wink at the impure methods which some companies employ rather than face the risk of throwing to the Rings that control the larger municipalities the additional mass of patronage and additional material for jobbery which the business of water and gas supply carries with it."—*The American Commonwealth*. Bryce. Vol. 1. Pages 648-9.

"Perhaps the most menacing power is that wielded by the great local corporations, including the railroad and tramway or street car companies. Whether by the use of money, or, as it is thought more probable, by influencing the votes of their employees, or by both methods, these corporations seem to hold the councils in the hollow of their hands. One of them lately secured from the city legislature, at a merely nominal figure, a public franchise, which, while it made the streets more dangerous, added to the market price of the stock about $6.000,000. And this was done by a two-thirds majority over the veto of the mayor, in the teeth of an active agitation conducted by the most worthy citizens. Against scandals like this, the best city charter furnishes little protection."—*The American Commonwealth*. Bryce. Vol. 2. Page 429.

"Nothing has so corrupted and debased our political life as private corporations in control of natural monopolies. We have got so used to municipal corruption that it seems to us as something inevitable, but such is not the case. * * * It is idle for us to say "we must wait until we become morally better." I believe we are as moral a people to day as the English or the Germans. Our terrible corruption in cities dates from the rise of private corporations in control of natural monopolies, and when we abolish them, we do away with the chief cause of corruption.

'But we must take natural monopolies out of politics.' It never has been done, and it is an impossible thing to do—absolutely impossible. No gas works, no water works, no street car lines, no steam railways, are so thoroughly in politics as those in the United States".—*Problems of To-Day*. Richard T. Ely. Page 129, &c.

than the worst of the corruption from which we have suffered would be the subsidizing of every corrupt, and the blackmailing of every public interest by such a corporation gambling for ten times the stake that was ever played for before? Bruised by King Log, do we yearn to be swallowed by King Stork? And to what extent, meanwhile, will any saving in operative expenses be handed over to the public?

It must also be remembered that the question is not exclusively one of net profit and loss in street railway operation, as shown by street railway accounts; but as to the balance of advantage or disadvantage *to the public*, all factors considered, of municipal as contrasted with private operation. In a very large proportion of the cases where street railway operations show a loss, their promotors have built the roads to develop new resident quarters or pleasure resorts, or to give additional facilities to property already owned by them; and they are therefore substantial and satisfied gainers, though the street railway accounts may show a loss.

In the case of such a municipality as ours, this consideration becomes of ever greater importance, and involves most important factors that private operation cannot take into account. In nine tenths of our territory any probable loss in doubling railway facilities would be more than met by the consequent increased returns from taxation of the locality benefited, were the tax rate kept the same, or by a general reduction in rate, were the amount to be raised kept uniform—not to mention the enormous gain in property values which would accrue direct to citizens. A small proportion of the expense (whether on capital or interest basis) of our new parks, libraries, museums, zoological and botanical gardens, schools and colleges, applied to the lowering of fares—either generally, or at special hours, or on appropriate conditions—would double their use by those to whom it is most necessary in the interest of public recreation, culture and health that they should be used. And lower fares within certain hours would be a boon to our army of wage-earners,—the great majority of whom, for an indefinite time to come, must live within a few miles of their work—which would be more appreciated than even noble plans for suburban settlement and transit, which can serve only the comparatively few.

Indeed, all experience shows that, given the leverage toward action that would be supplied by such public interests to be subserved, many of the reductions of fares resolved upon as a sacrifice to the public weal would prove so profitable in actual returns as to pave the way toward what would now be thought Utopian extension of public service at lower rates. (9)

It is in the considerations above noted that I see the most sure advantage *to the public* by Municipal Operation of public franchises. It is the only way in which each of the functions of city government can be made effectively to aid every other, and the best service of each co-ordinated with that of every other for the public good.

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(9) The following from *Street Railway Journal* (for May, 1897), speaks for itself, though far less striking than would be a similar showing for the territory included in the Greater New York:

The State of Massachusetts furnishes a most excellent field for investigation (*a*) of the way in which street railways have encroached upon the field formerly given over almost exclusively to steam railroad operation; (*b*) of the extent to which the street railway "riding habit" has been cultivated when ample facilities have been given; (*c*) of the influence upon gross and net earnings of the suburban and interurban additions to city mileage. * * *

GROUP A.—BOSTON-LYNN-GLOUCESTER SYSTEM.

That portion of Massachusetts indicated by the letter A on the map is one of the richest street railway territories in the world. It contains no less than forty cities and towns, with an aggregate population of over 1,100,000, of which Boston proper has but 500,000 while the remainder is divided up among three cities of from 50,000 to 100,000, five from 25,000 to 50,000, eleven from 10,000 to 25,000 and twenty of less than 10,000. The beautiful North Shore furnishes a never-failing motive for pleasure riding for at least six months in the year, while the multifarious business reasons for travelling among these prosperous and wealthy towns make the annual regular traffic immense.

The street railway system serving this territory now comprises twenty-eight proprietary and twenty operating roads.

The following table shows the main changes which have taken place since 1885:

Items.	1885.	1890.	1896.
Cities and towns connected by street railways	30	31	40
Population entire area	821,816	967,706	1,106,102
Per cent. increase		17.7	14.3
Population served	763,211	916,750	1,106,101
Per cent. increase		20.1	20.8
Miles street railway track	284.2	414.4	609.8
Per cent. increase		45.8	47.1
Total capitalization	10,202,400	17,144,442	35,316,660
Per cent. increase		68.0	106.0
Passengers carried	89,788,815	130,509,961	205,917,734
Per cent. increase		45.3	57.8
Passengers carried per capita served	118	142	186
Gross receipts	4,468,773	6,692 397	9,190,100
Per cent. increase		49.8	48.1
Net earnings from operation	760,519	1,479,284	2,444,011
Per cent. on capitalization	7.4	8.6	6.9

In this discussion it cannot be too constantly kept in mind that it is not with the past but the future that we have to deal. The problems most pressing for solution are not those that, in the case of our smaller cities, or sparsely settled or backward communities, have loaded down the general average of profit in operation of the franchises in question. We have rather to deal with those cases—among which New York comes first—where the population is steadily increasing in numbers and density; commerce steadily growing in amount and profit and in its urgent demand for the best possible service; civilization ever going farther and farther in supplying the essentials of culture, and so ever stirring newer and higher needs to be met; where every concession which enterprise has made to public convenience, has showered gold upon the giver almost as surely as benefits upon the recipient; and where experience and promise concur in pledging the utmost of success at the least of risk. ([10])

The rate of increase in the population of the entire area has been on an average about 3 per cent. per annum. The street railway mileage has increased at the rate of about 9 per cent. per annum, and is now (in 1896) more than double the mileage of 1885. The capital investment has increased enormously, being now 3½ times that of 1885, and this without serious over capitalization of costs. The increase of the riding habit is shown by the fact that the street railways of this group carry their population 186 times per annum as against 142 times in 1890, and 118 times in 1885.

([10]) What is our present situation? As existing and developing, our street railways are of every character—underground, surface and elevated, with every sort of motive power—horse, steam, cable, and electric, of every grade (except the best), and with cars and other accommodations of every stage of antiquity and wear. One half of our people are fairly well accommodated as to frequency, rate of fare, and convenience of route, and perhaps one fourth at reasonable rates when transfer facilities are taken into account. But very few are offered either proper or even standard accommodations. As to rates of fare, with the exception of those who utilize successive or long-distance transfer facilities, these are exorbitant when the density of our population and packed crosstown routes are recalled.

What results could we expect in the near future? This is not an unfair question, though any one who can weigh the answer will appreciate how hard it is to frame. And I shall not for a moment venture to admit all that I confidently believe. It is, however, within the bounds of probability to say that if, when the Greater New York becomes such on January 1st, 1898, all street railway franchises and plants within the boroughs of Manhattan and the Bronx could be turned over to the city, at a generous valuation, or on condition that their operation be kept financially profitable after charging off for interest, taxes, depreciation, fund for betterment, etc., it would be feasible immediately to reduce all fares for trips below Fifty-ninth street (including transfers) to three cents, all crosstown trips (without transfers) to two cents, all fares with transfers throughout the common territory, between 5:30 and 8 A. M. and 4 and 7:30 P. M. to two cents below Fifty-ninth street and three cents elsewhere; and also to issue school, park, etc., tickets in bunches at half rates. Before January 1st, 1899, had arrived, this would have proved so profitable that other reductions and concessions would follow as matters of course. The cars would meanwhile have been made more pleasant and comfortable, and lower fares still, for routes of less than two miles, given a fair trial; while our bridge, ferry, elevated and surface systems on both sides of the East and Harlem rivers to the harbor would have been so co-ordinated and improved as to save more in time than would in money, the fare reductions outlined; which, however, would also be largely extended to water in connection with land routes.

MUNICIPAL OPERATION IS GROWING IN FAVOR.

It is in the highest degree significant that for the last twenty-five years the best judgment of the most successful communities has been steadily committing itself to the municipal operation of one after another branch of public service that had theretofore been left to private management.

Water Supply.

At the opening of the century municipal water supply was so rare as to be exceptional, while private supply was the rule. For more than a generation the instances of both have been so numerous that, as far as experience could do so, the problems connected therewith have been thoroughly thrashed out. As a result, the latest statistics show that municipal operation of water supply franchises is now (and each year more so) the prevailing system.(11)

That this is conservative, the late experience of Detroit demonstrates :—"Mayor Pingree said that a three-cent fare in Detroit was enough. The companies declared it impossible. Outside capitalists thought otherwise, and offered to build a new road in Detroit.

A franchise was granted the new company for 40 miles of railway, mostly in the outskirts of the city on routes that had been considered unprofitable by the old companies.

The new company agreed to sell 8 tickets for a quarter, good from 5.45 A. M. to 8 P. M., and six for a quarter, good for the rest of the night.

The new road was built and operated as agreed, furnishing excellent service and universal transfers. The men worked ten hours a day and received 21 cents an hour. The old companies reduced their fares to the new basis and even made a 2½ cent rate on one of their lines. They had all the best streets and the sympathy and support of the wealthy and influential classes.

The average cost of operation for the year ending July 1st 1896, was 2.36 per passenger, and the average receipts were 3.3 cents per passenger. The cost of operation per car mile was 7 cents, and the receipts per car mile 10 cents—showing a profit of 5.3 per cent. the first year on the total cost of construction, in spite of bad location, strenuous opposition, low fares and a business of only 3 passengers per car mile. New York has over six and one-half passengers per car mile, and would have more if fares were reduced—and a two-cent fare would not be impracticable. It is characteristic that old Detroit companies and the new one have since effected a combination; but not until the new company had offered to operate all the roads in Detroit at a uniform 2½ cent rate with free transfers all over the city and pay interest on the purchase money if the city would take the roads by right of eminent domain under proper legislative authority.

(11) "Of no less interest than the number of works and towns which they supply is the ownership of the several plants. Of the 3,196 complete works in the United States, 1,690, or more than one-half, are owned by the municipalities which they supply, and 1,489 by private companies, leaving seventeen plants of unknown ownership. In Canada there are 109 public and 35 private plants, with one of unknown ownership.

"In the early days of water works construction in this country private ownership was the rule. Thus, at the opening of the century there were 17 cities with more or less complete public water supplies, only one of which was owned by a municipality. As more works were built the relative number of public plants gradually increased,

Light Supply.

Not less significant has been the experience in city light supply, which until lately was likewise, in the main, furnished by private parties, but which, especially since the development of electric light, has been so frequently and with such generally satisfactory results assumed by municipalities (12) that the propriety of the operation by municipalities of this franchise was long since put beyond question, first by a line of decisions and later by the statute law of the land. (13)

Street Railways.

It is, however, in the matter of transport facilities that the tendency toward municipal operation has been the latest, as in many respects it is the most marked, of such developments. Scarcely fifty years old, street railways were practically undeveloped here, and unknown elsewhere, until after our late civil war. But

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reaching 27.8 per cent. in 1885, when there were 15 public and 39 private works. It took twenty years for this small number of works to double, at the end of which time, or in 1855, there were still only 106 water works in the United States. Of these, 48, or 45.3 per cent. were owned by the public. In the five years which foreshadowed the strife of 1861–65, and in the half decade of the war, public ownership fell to about 42 per cent. The war over, water works were built more rapidly than ever before, until in 1875 there were 422 plants, and the public ownership had increased to 54 per cent. of the total, which point has not since been quite attained, although almost reached at the present time. After 1875 privately owned works increased so rapidly that the percentage of public owned works decreased, until in 1890 it was only 42.9 per cent. Since then it has increased again to 53.2 per cent., or just below the 53.8 of 1855. But in 1875 there were only 422 works in the United States, while there are now 3,196.

"In Canada the public works are now over 75 per cent. of the total, Canadian cities sharing the marked English preference for municipal control of water works and similar undertakings.

"In the several States there is much diversity in the proportions of public and private ownership, all of which is shown in detail in Table 1. Taking the country by groups, New England and the South Atlantic States are very evenly divided as to ownership; the Middle, South Central, Southwestern and Pacific States have private far outnumbering public works, while in the North Central and Northwestern States the reverse is true. Many indivdual States are at direct variance with their group tendency. Maine, with 57 works, having only 7 public plants, while Massachusetts has 113 public to 38 private works. New York and Pennsylvania contain the most of the works in the Middle group, with its preponderance of private ownership, but New York has 172 public to 170 private works, while Pennsylvania has only 82 public to 259 private plants. * * * * * *

"*One of the most significant things regarding ownership is the strong tendency to public control in the larger cities. Of the 50 largest cities in the United States, 19 have changed from private to public ownership, and only 9 are now dependent upon private companies for their supply, as follows: San Francisco, New Orleans, Omaha, Denver, Indianapolis, New Haven, Paterson, Scranton and Memphis.* * * * *

"Altogether about 200 cities and villages have changed from private to public ownership, and only one-tenth of the number from public to private. Over half the changes from private to public ownership have been made since the close of 1890, and about one-third of the reverse changes in the same period. The geographical distribution of

they proved so essential to city conditions that in every civilized city or large village they have for years been as much a matter of course as paved streets. The first developments being due to private enterprise, the method of private ownership and operation of street railways became practically universal, largely in connection with plants which have not yet been worn out, and under charters having years yet to run. And yet so unsatisfactory has proved in this country the experience of private control of street railways that our leading economists unite in charging to it the general depravity in municipal administration that is the recognized feature of the period from which we are just emerging; while throughout the United States and Great

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the works, the dates of the changes, the dates the works were built and the 1890 populations of the cities in which the works are located are shown in Table II.

"The largest cities which have changed from private to public ownership since 1890 are Kansas City and Syracuse. Duluth has municipal works under construction, and has voted several times to buy out the local company, but through legal defects in the elections has been prevented from doing so.

"Massachusetts takes the lead of the States in changes from private to public ownership, 30 companies, located in 27 different cities and towns, having given away to public ownership, generally through purchase, the changes being begun with the completion of the Boston works by the city in 1848. There remain in the State 38 private against 113 public works, nearly half of all the plants originally built by companies having been bought by the cities or displaced by city plants, and about 20 per cent. of all the works in the State being included in the change. Not a plant built by a city in this State has been turned over to a company."—*Am. Water Works Manual, 1897*, pp. H-L.

In this regard London is in the midst of a most interesting experience. July 6, 1897, the Water Affairs Committee of the London County Council reported for adoption the following resolutions:

> "(*a.*) That in the opinion of the Council the water supply of the metropolis should not continue in the hands of private companies.
>
> (*b.*) That in the opinion of the Council, the undertakings of the metropolitan water companies should forthwith be purchased at the fair and reasonable value of the same, regard being had to the rights, special circumstances and obligations of the companies."

This, coming up on July 13th; was received and ordered to consideration; a motion to reject beaten by 57 nays to 40 ayes; a motion to adjourn beaten by 54 nays to 32 ayes; whereupon those opposed to municipal operation filibustered, broke the quorum and hung the matter up for the time being.—See *London 6:585, 609.*

([12]) "Gas plants are operated by one hundred and sixty-eight (168) cities of England, Scotland, including almost every city of consequence except London: by three hundred and thirty-eight (338) cities of Germany, including thirty (30) of the largest, such as Berlin, Hamburg and Dresden; by Brussels, by Amsterdam, by many cities in the French colonies and by twelve (12) American cities, including Philadelphia, Nashville, Wheeling and Richmond; and electric lighting plants are operated by over two hundred (200) American municipalities, including Dunkirk, in this State (New York), and Jacksonville, Springfield, Little Rock, Topeka, Bay City, Detroit and Chicago; by many British cities; by some in the Australian colonies, and by thirteen (13) German cities, including Hamburg and Dresden."—EDWARD M. GROUT, *Municipal Affairs*, 1:239 (June 1897)

([13]) See Indiana statute as to cities, and N.Y. Village act already referred to.

In London, parish after parish is operating its own electric plant for public lighting purposes.

Britain, as well as on the Continent of Europe, municipal ownership and control is universally accepted as not merely desirable and "coming," but as already "arrived"—the still numerous and important exceptions being regarded as "survivals"—not of the fittest.

Street railway service, however, differs from that of light and water in this, that its operation is a larger factor, when compared with the installation of its plant, than is the case with them. Not unnaturally, therefore, in the desire to meet the urgent demand for reform, the first and the then most obvious step was taken and municipal control assumed, while the actual operation of the franchise was still farmed out, generally for long terms. Experience has shown, however, that except for the power thus acquired by the city to redeem, after long waiting and at great expense, the rights it had given away, there has been but little gain, and that the scandals in connection with leasing street railway franchises have rivalled in negative fragrance those connected with giving them away in the neither good nor (yet) old days. In this connection the pioneers were the combined cities of New York and Brooklyn, which, under authority of the New York Statute of 1875, have operated since 1883, with success from the beginning, and every year with more marked efficiency and economy, a cable railroad of about a mile in length across the Brooklyn Bridge. Circumstances here, however, were so exceptional that they scarcely furnish a precedent, except of the capacity of a municipal joint committee to administer such a business.

Moreover, so recent and so general has been the development of electric traction in connection with the policy of municipal leases of street railway franchises to private corporations for long terms, that American cities have, in the main, become too far involved in comparatively tolerable arrangements, covering years ahead, to make possible the general testing of any new plan, though interest in municipal problems, and especially those concerning local authorities, is universal and growing. (14)

(14) In Canada, however, the growth of the border town, Port Arthur, on the north shore of Lake Superior, gave an opportunity which has been promptly used; and the municipality not merely owns the street railway franchise and plant, but operates it directly and successfully.

But in Great Britain, on the other hand, late circumstances have been favorable to new developments. The chaos as to street railway, or "tramway," development was ended by the Tramways Act of 1870, authorizing municipalities to purchase or construct tramways, to be left open for tolls or to be leased to private operators for not to exceed twenty-one years, with the right of the city at the expiry of the term to take over the plant at a valuation, without allowance for good will, providing approval is given by a central administrative authority. Almost at once in a number of cases, and in constantly increasing measure during the next twenty years, city after city purchased or constructed tramways, and leased them on twenty-one year leases; so that by 1890, in a large proportion of the cities of Great Britain, the street railway franchise and permanent plant was owned by the municipality and operated by private corporations under leases expiring between 1891 and 1910. The past few years, therefore—just when electric, cable and other novel methods of traction have been coming into vogue, and when municipal development has been most rapid, and interest in municipal problems most intense—have been just those which have offered British cities the opportunity to commence operation of their own tramways.

The main obstacles have been British conservatism, and the tendency to regard status as a vested right of whomever is interested in not having it disturbed. In addition there are large expenses involved in each case in procuring the special legislation required, there being no general law under which cities can operate their own tramways.

In LONDON the years since 1891, when the earliest leases of her street railways commenced to fall in, have been those of steady assertion by the municipality of its rights, of litigation by tramway companies, and of slow but sure victory for the city (more properly the county) of London, as in one after another case a valuation for city purchase was made. By this means London has now acquired, as city property, the plant of several private operators; though many old leases are still in force, and London is thus prevented from inaugurating any comprehensive system of municipal operation. Her policy is indicated by the fact that in 1896 an act of Parliament was procured "to Empower the London County Council to Work their Tramways;" that the city is

fast buying up old lines and building new ones; and that the differences between the advocates of municipal operation and private management have been compromised by the granting of a shorter lease, fourteen years, of the plants already purchased; so that, by the time the others can be acquired and the contemplated extensions made, the city will be in a position to prepare for direct operation of the completed system. The pitched battle is likely to come over the installation, on the new lines about to be built, of experimental electric plants for municipal account, the tramway companies still operating their cars by horses.

In 1893, GLASGOW, the second city in the kingdom, failing to induce the private company, which was negotiating for a renewal of its lease of part of the city tramways, to build new lines and give better accommodations, obtained the necessary Parliamentary authority, and in July, 1894, when the lease expired, commenced to operate directly for city account the tramways involved. As opportunity offered, other lines have been bought in, and I quote below from the summaries which conclude the reports of the city committee in charge, as made in 1895, 1896 and 1897, respectively, as well as from the latest criticism upon them.(15)

(From Report, August 1, 1895.)

(15) "The committee desire to state that, although the present results are satisfactory this first balance has been adversely affected in many ways.

First of all, the present accounts cover a period during which the enormous difficulties and expenses necessarily attendant upon the sudden starting of such a huge undertaking, with an entirely new equipment, have had to be met. At the start, and for a considerable time thereafter, the unseasoned condition of the 3,029 new horses, weakened as they were by the influenza epidemic, rendered it impossible for them to do more than half work, while even more than full expenses were being incurred for horse-keeping and management.

Another point is, that, owing to the corporation financial year, ending on May 31st, the month of June, which is one of the most remunerative of the whole year, is not included in the accounts.

Further, the committee have given effect to what they believe to be the general feeling of the citizens, viz.: that the cars, which necessarily form a notable feature of the streets of the city, should not only be tasteful in design and color, and comfortable for passengers, but also that their general appearance should not be marred or their destinations obscured by advertisements. * * *

The committee have also given effect to the conditions generally which the corporation laid down in December, 1889, as the basis of the negotiations for a new lease to the Glasgow Tramway and Omnibus Company, Limited, particularly those relating to uniform and hours of labor, which the old lessees estimated would involve them in an additional expenditure of $13,085 a year, and their service and staff were considerably less than those of the corporation.

The committee have also had to meet the strongest competition which the old lessees could offer with their whole former stud of seasoned tramway horses, and their 175 omnibuses.

While in some respects circumstances favored Glasgow, in many others her experiment in municipal operation was a crucial one, and has been vindicated by its complete success. It has increased facilities, bettered service, lowered fares, raised the wages and reduced the labor hours of its employees, and produced so steady and substantial a profit that the cautious burghers are adding to their investment by taking every chance to acquire new lines. In economy, in enterprise, and in prompt adoption of improved methods, the experience had confutes the assumption that municipal business cannot be directly conducted by a city for its own needs as efficiently as through private agencies.

The committee * * * have recognized that, in order to make the enterprise a commercial success, the best policy is to make it as far as possible popular with the great bulk of the citizens in whose interest it was taken up. They therefore, at the very beginning, introduced 1/2d. fares, for half mile distances, and soon after the distances for fares of 1d. and upwards were prolonged * * * and the hearty response of the citizens has made this policy a success.

They are pleased to say that the financial success which has attended their labors during the first eleven months is beyond their most sanguine anticipations, and they do not know that any other tramway undertaking has hitherto been in a position to pay all interest, working and general expenses and maintenance, and begin writing down their capital account within a year from starting operations."

(*From Report 17th June*, 1896.)

"During the year—which is the first full year the Tramways have been worked by the corporation—the principal work of the committee has been in endeavoring to cope with the ever-increasing volume of traffic. More ground has had to be purchased, and addition stables and car sheds erected. The stud of horses has also been increased, and more cars provided. * * *

A sub-committee has been appointed for the purpose of considering the advisability of adopting some form of mechanical traction. The members of this sub-committee have already visited cities in England and on the Continent where different systems can be seen in operation. * * *

On 1st January last, a Friendly Society was instituted among the employees of the department. The rules of the society were approved of by the committee, and the department adds to the funds a sum equal to one-half of that contributed by the members, as per minute of Town Council. * * *

From the accounts published herewith, it will be seen that this new business undertaken by the corporation is being conducted on sound commercial lines. All the plant, &c., has been fully maintained out of revenue, and, after writing off capital an ample amount for depreciation, considerable sums have been placed to general reserve fund and reserve fund for permanent way renewals. * * * The Tramways undertaking is proving a benefit to the general finances of the corporation."

(From Report of June 18, 1897.)

"On the 11th November last the Corporation took over from the Glasgow Tramway and Omnibus Company, Ltd., their lease from the Govan Commissioners of the Govan and Ibrox Tramways, so that now all the Tramway lines in and around the city are being worked by the Corporation. This lease embraces the tramway lines from Paisley Road Toll to Govan and Ibrox respectively, and also the stables and car-shed in Govan.

Throughout the year a much closer service of cars has been run than formerly, and it has been the desire of the Committee to give to the traveling public the very best service which it is possible to work with a safe margin

LIVERPOOL, the third British city, commenced municipal operation of her tramways on September first, instant, having just obtained parliamentary authority therefor. The terms were so characteristic that they are worth noting. It was arranged with the operating company whose lease was falling in that it should co-operate with the city in getting the city's bill through parliament and that, when the bill should receive the royal assent—

The city should purchase the company's plant, etc., at $2,850,000.

The city might retain any of the company's directors for a term not to exceed five years, as assistants to its committee in charge.

Last summer the Committee granted an increase in wages to all grades in the service, amounting to about £5,300 a year. This increase took effect on 2d September last, so that the extra cost on this account falling under the year now being dealt with amounts to £4,000.

The Assessor's valuation, which is based on the profits of the undertaking, amounted last year to £55,301, as compared with 20,751 for the preceding year. The local rates levied on this valuation, therefore, amounted to £7,483 17s. 8d., as compared with 8,064 18s. 10d., being an increase of 4,418 18s. 10d. On the other hand, the price of grain has been unprecedentedly low, and a very considerable saving has thus been effected on the Provender Account.

On 11th November last another important concession was granted to the travelling public, inasmuch as the penny fare was made to cover any three consecutive halfpenny stages on the system.

It should also be noted that, in addition to the development of the Tramway system during the course of the year, the following increased means of rapid communication between one part of the city and another were opened :

On 10th August, 1896.....	Glasgow Central Railway.
On 1st October, 1896..	Lanarkshire and Dumbartonshire Railway.
On 21st January, 1897.....	Glasgow District Subway.
On 1st February, 1897.....	Caledonian Railway (Tollcross Extension).

All this increased facility for traveling will tend in some measure to affect the revenue for a time, but it is not anticipated that it will have any serious effect. In any case the public have the enormous benefit of the increased facilities for getting about the city at unprecedentedly low rates, and it is gratifying to find that the results of the year's operation are practically the same as the results brought out in the previous year's report, notwithstanding all the competing traveling facilities now offered to the citizens.

It is doubtful if the public fully realize the benefit they are deriving from the present fares on the Tramway system as compared with the fares charged before the Corporation took the working of the Tramways into their own hands, but it can be approximately reduced to figures. Supposing the 99 millions of passengers who traveled by the Tramway cars during the past year had paid the fares charged three years ago, it would have cost them about £180,000 more than it has done. This is not a sum that can be added to the balance, but the citizens have got the benefit of it nevertheless.

The Sub-Committee appointed on 28th August, 1895, for the purpose of considering the question of Mechanical Traction continued their investigations throughout the year, and reported in favor of the adoption of the Overhead Electric System, by way of demonstration, on the Springbun and Mitchell Street route. This recommendation was adopted, and was finally approved of by the Town Council on 6th May last, and the Committee are at present making the necessary arrangements for equipping this route accordingly.

The city might retain the company's auditors at current compensation.

The city should take over all other employees at current wages.

The city should pay the company's solicitors for the loss of their client, the company's auditors for the loss of their position (in case the city did not retain them), and the company's directors so far as they were not retained as assistants for the loss of their office, proper annuities to be adjusted.

This has been carried out, and the late directors are serving as advisors of the City Committee. The town clerk writes that it is the intention of the city "to abolish horse and substitute me-"chanical traction and to lay down a number of additional routes."

MANCHESTER is so situated with reference to surrounding municipalities included in her street railway system, and to the several parts of the system itself, the leases of which expire at

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From the accounts published herewith, it will be seen that the Department is in a good financial position, and it is very encouraging to the Committee that their efforts to make the Tramway system of the city as serviceable as possible are showing results so favorable in every respect, through the citizens taking full advantage of the use of their own cars."

The following is a summary statement accompanying a critical analysis of the accounts for 1897, made by an authority at once most conservative and competent.

"This year, as last, a good deal of criticism has greeted the accounts of the Glasgow Corporation Tramways, and as the Glasgow lines are the biggest speciman we have of municipal management, it is worth while looking into the figures a little. While we are no advocates of tramway working by local authorities, it seems to us that some of the criticisms levelled at the Glasgow Tramways Committee are a little extreme. A standard of conservatism in accounting is set up which very few tramways companies attain to, and when the Corporation naturally do not reach this ideal—an ideal toward which they perhaps do not aspire—they are blamed for coming short. On the other hand, when judged by a reasonable standard, there are some things which are not all that might be desired, but where is the tramway company of which the same may not be said? A dispassionate consideration of the accounts may therefore be welcome. As a preliminary, it should be borne in mind that the Corporation are not—like the directors of a company—running the system for the purpose of getting every penny of profit out of it which can possibly be made. The Town Council are of course strongly amenable to public opinion, and they must give a frequent service, must have first-class cars and horses, must pay their men good wages and grant them short hours, must keep everything in first-class order, and in fact run an ideal system from the point of view of the public. All this costs money, and it is one of the dangers of financial disaster, inherent in municipal management to which we have often referred. But Glasgow tramways are a long way from financial disaster, and this arises from the fact that there is a large and lucrative business naturally, and partly because the concern is managed with sufficient skill to steer a safe course between the Scylla of public demands for more concessions and the Charybdis of starving the business by over-economy.

On the whole matter of the finances we are not inclined to echo the opinion that Glasgow tramways are in such a desperate position, despite their municipal management. We think that with care they will continue to do well, but in view of the prospective change in methods of traction, strict economy is necessary so that the surplus of revenue over working expenses may be as large as possible, with the object of writing down rapidly the value of the whole equipment and buildings."—*The Railway World* (London), August 18, 1897, p. 254.

various dates in the future, that the obstacles to undertaking municipal operation seem for the present insuperable. Moreover, it is conceded on all hands that the tramway company lessees have dealt with the city most liberally, and that existing leases are advantageous to the city. It therefore seemed possible, two years since, that no attempt would be made at municipal operation. But a committee of its council has since investigated the results of muncipal operation in Glasgow and elsewhere; conferences have been held with the representatives of Salford; and the committee has now recommended to the corporation to work the lines itself at the expiration of the lease to the company in 1901.

In BIRMINGHAM so satisfactory were the proposals of a new tramway company for a renewal of lease for 21 years, that more than a year since it was provisionally voted to make such arrangements. But on June 16, 1897, the Public Works Committee of the city having failed to come to an agreement with the company, reported that all negotiations had been dropped; and the city is again discussing what is the best course to take to remedy existing unsatisfactory service before 1907–1911, to which dates existing tramway leases run.

LEEDS has operated her street railways since February, 1894, thus anticipating by a few months Glasgow's experiment in a similar direction and meeting like success—prompt betterment and increase of facilities and lowering of fare for the public—at the same time that better wages for shorter hours were paid the employees. The foot-note below is condensed from a full memorandum just received from the Town Clerk of Leeds.([16])

([16]) "I am unable to send you copies of the accounts, but the following extracts will show that the working of the Tramways by the Corporation has been a financial success.

	Feb. 2 to Mch. 25, '94.	Mch. '94–Mch. '95.	Mch. '95–Mch. '96.	Mch. '96–Mch. '97.
Car Receipts.....	£6,025 17 0	£49,338 6 5	£56,476 6 10	£62,879 12 5
Other Receipts.....	432 15 9	1,680 4 2	1,372 9 1	1,346 5 2
Total Receipts.....	6,458 12 9	51,013 10 7	57,848 15 11	64,225 17 7
Total Expenses.....	5,652 7 3	44,123 8 10	46,013 18 3	50,562 8 3
Gross Profit.....	806 5 6	6,890 1 9	11,834 17 8	13,663 9 4
Int. on Loans.....	899 1 1	3,670 0 3	3,990 9 2	4,447 1 7
Net Profit.....	£*92 15 7	£3,220 1 6	£7,844 8 6	£9,216 7 9

*This is a deficiency, and is accounted for by reason of the extraordinary expense incurred in repairs and partial relaying of the track, which was in a dilapidated condition when purchased * * *.

SHEFFIELD has just completed her first year of municipal operation of her street railways, which is thus summed up, editorially by *London* in its issue of August 19th, 1897, "A year "of municipal tramways, in Sheffield has brought a clear gain of "over £8,000 (net) to the corporation, has produced two million "additional passengers, has secured to the men an extra £2,500 "in wages, with free uniforms and other advantages (including "shorter labor hours), and, having secured a better service, has "further led the City Council to adopt electric traction"; while the itemized statement of account published in another column, states and apparently shows that the Corporation Committee "had charged themselves with every item they fairly could."

DUBLIN'S experience, though scarcely as pertinent, is equally interesting. Local tramway service has become so unsatisfactory that, after struggling with conditions under its present operation by a private horse-tramway company, on November 2, 1896, the City Council resolved—

"That the time has come when the corporation [of Dublin] "should seek parliamentary powers to enable them to construct, "purchase or lease, and work, by animal or mechanical power, "all or any of the existing tramways within the city boundaries" [also to construct and work new tramways, etc., etc.]

Whereupon the tramway company promptly opened negotiations and offered, in case the city would leave the tramways in its hands and help it to get the bill through Parliament, *to permit it to change its motive power to electric traction*—

1st. To pay a license fee of twenty-five hundred dollars a year for each mile of tramway now existing or hereafter to be constructed.

2nd. To charge no higher fare than one penny from any city terminus to the city boundary, and not more than two pence for any fare within the city.

The following is a statement of the working hours and rates of pay of drivers and conductors under the late Leeds Tramway Company from whom the Corporation purchased, and subsequently the Corporation. *Under the Leeds Tramway Company* (averages): Drivers 81⅓ hours per week, at 4 1/10 d. per hour; and conductors 81⅓ hours per week, at 3¼ d. per hour; *under the Leeds Corporation* (averages): Drivers 66¼ hours per week, at 5½ d. per hour and conductors 67 1/12 hours per week, at 4¾ d. per hour.

Since the Corporation took over the tramways, the number of workmen's cars have increased, and the fares charged are ½ d. per mile.

3rd. In case any new or improved method of electric traction be discovered, to introduce it on the principal (designated) streets if the city so requested.

4th. To give the city the option, in 1928 or at the expiry of each seven years thereafter, to take its plant at a valuation; Which proposition is still open.

Further detail would be superfluous here. HUDDERSFIELD has owned and operated her street railways since 1891; and PLYMOUTH since 1893. In 1892 NEWPORT secured authority of parliament to operate its city tramways. In 1893–4 WIGAN, ST. HELENS, GOVAN, BOLTON, BLACKPOOL and EDINBURGH, and in 1896 SOUTH SHIELDS and SHEFFIELD secured similar authority.

The index to private acts of Parliament for 1897 is not yet published as this goes to press, so that I cannot say what legislation has been had this year; but by correspondence during the past month I have been officially advised as follows:

LEICESTER writes that it has just secured parliamentary authority to work its tramways;

BRADFORD that

"the corporation have a bill now in parliament which, if "passed, will authorize them to lay five and one-half miles of "additional tramways, and will also enable them, if they think "fit, to work the whole of the tramways in the city after the "expiration of the leases now subsisting. The general motive "power is steam, but one section is worked by horse. It is very "probable that the new lines, when constructed, will be worked "by the corporation itself instead of being leased, and that the "motive power used will be electricity."

BLACKBURN that

"The municipality has not the power to work tramways; but "it is at the present time contemplating promoting a bill in par- "liament to obtain such power, in the event of which it has "arranged terms for the purchase of the tramways from the "company, which it will then work.

DUNDEE that

"I may state that the local authority are at present consider- "ing a scheme for the taking over of the working of the tram- "ways, and that the water and gas supplies are already in the "hands of the local authority."

BOLTON that:

"We have now secured power by an act of parliament "passed last year, to work the tramways municipally in case "we cannot find a lessee on satisfactory terms; to do this, "however, we should have to wait for some years, as the present "lessees' lease does not expire for some time and as the lease has "been granted by several different authorities it is terminable on "different dates. I am therefore unable to give you the particu- "lars as to the municipal working of the tramways, but I may "say as a rule all undertakings seem to tend to come under the "control of municipal bodies, and the people as a whole are con- "fident that their interests in all matters are safe in the hands of "the municipal body representing their interests."

HALIFAX that:

"Of course you understand that we have to apply to parlia- "ment before we are allowed as a corporation to put down tram- "way lines. Last year we promoted a bill in parliament which "has just received the Royal Assent.

"Many syndicates and companies (both English and Ameri- "can) have offered to put down lines and work tramways, but "after much discussion we have decided that it is in the public "interest, for the public interest, for the corporation to have the "the tramways entirely in their own hands. Every other de- "partment is here managed by the corporation for the benefit of "the citizens; the gasworks, waterworks, electric light, sanitary "department, street cleaning, borough hospital, are all in the "hands of the corporation, who do not seek to make a profit out "of these undertakings, but simply to do the best they can for "the benefit of the people. We are at present engaged in put- "ting down an electrical system of tramways on the overhead "trolley wire system. The power is to be supplied from the "existing corporation electricity works. The streets along the "route will be lighted by electricity, the arc lamp being combined "with the trolley poles. We are able to borrow money at 2 1-2 "per cent, and our only object will be to pay the interest on the "capital and sinking fund and the working expenses, and get the "best accommodation we possibly can at the lowest rate for the "benefit of our citizens."

BIRKENHEAD that:

"The Municipal operation of the tramways is under consider- "ation at the present time."

WOLVERHAMPTON that:

"The Council has now under consideration the direct opera- "tion of the local tramways on the expiration, July, 1898, of "their lease to a private company."

In General.

When we remember that it is only three years since Glasgow, and Leeds undertook the first experiments in Municipal operation that were on a scale large enough to be instructive, and that it is but two years since the first results of these experiments became known, it can be appreciated how convincing were these results, when criticized by the hardheaded and conservative committees of rival cities, desiring to do the best possible for their own towns, who promptly "went and did likewise." (17)

And when we note that in each of these great cities, where economies are weighed and watched as closely as anywhere in the world, the city committee in charge promptly raised wages and shortened labor hours; also, that in these, as in other cases, municipal enterprise has been ready to investigate and exploit the latest and best methods of operation, and has constantly increased facilities and lowered fares, we can hardly say that official management is too rigid to keep up with private enterprise. And it would be superfluous, though not unfair, to dwell upon the point that it was to better the methods and facilities used by private operators that the cities in question took up the work at first.

Once for all, let it be clear that no claim is made that all experiments in municipal operation either have been successful, or will prove so. It is submitted, however, that, so far as opportunity has been given, *its results compare favorably with those of the most carefully managed private enterprises in the same localities*, and this by the judgment of the sharpest critics—most interested to judge aright.

It is also significant that, in proportion as a city is so enterprising and successful, as most markedly to serve as a

(17). As indicating somewhat of the extent to which municipal operation has become a practical question the following data are given of the population at its last census, of each of the cities of Great Britain, which, as above noted, are either now operating their street railways or have commenced preparations so to do; London, 5,634,000; Glasgow, 678,000; Liverpool, 518,000; Manchester, 454,000; Leeds, 368,000; Sheffield, 324,000; Edinburgh, 268,000; Dublin, 254,000; Bradford, 216,000; Leicester, 175,000; Bolton, 115,000; Huddersfield, 95,000; Plymouth, 84,000; Halifax, 83,000; St. Helens, 71,000; Newport, 55,000; Blackpool, 23,000. Of the remainder noted Birmingham has just failed in the attempt to secure reforms through the tramway company to which it has leased its roads, while Dundee, Blackburn, Birkenhead and Wolverhampton have municipal operation under consideration.

model for others to follow, it is generally most famed for its enlightened and generous administration of public franchises. And in study of this question I have found proof on every side of how weak it is to fancy that we are too foolish or depraved to be able successfully to handle administrative problems, such as have been met by the towns of Great Britain. To any one who looks into their past there are disclosed conditions compared with which, any obstacles to be overcome by us are but child's play, while our resources, personal and political, social and financial, are much more nearly adequate. Critically to scan what is proposed is conservatism; but to stick to the worse because we dare not trust our people to administer the better, is cowardice which will ever be scourged by the event, whenever our people are given a chance.

"But," asks some timid well wisher, "Where is all this to stop?" "When will we get to the end of this constantly doing more for people?" Nowhere and never, unless we are interrupted by the millenium.

Every decade, and more and more each decade, has the success of one after another branch of public service shown the way to others, in large measure made possible by the stronger public that it has helped to make. It would not do to discuss this here—mainly because I can no more imagine what will be the realities of a generation hence than could the objector believe me were I to describe them. For the new Shoreditch is not further advanced beyond the old one than in every really live city, while many of us are yet living, its conditions will be better than the best it can show to-day.(18)

(18) Shoreditch forms a London parliamentary borough on the north side of the Thames and in the East Central District. It has an area of one square mile and a population of 124,009, with the largest proportion of artisans of any London borough, viz.: 35 per cent. Shoreditch is therefore poor. Many an electric lighting company had wished to light up Shoreditch, for, as already said, its area is but one square mile, its population is dense, many of the people requiring a light motor for the staple industry of the borough, furniture and cabinet-making; besides, public-houses abound, to the number of 300, and they are the great consumers of electricity until a very late hour (12:30 P. M.), although many other small shops successfully rival their bad example.

But Shoreditch resisted the wiles of electric lighting companies, and in 1892 obtained the consent of the Board of Trade to furnish its own electricity for public and private purposes. Shoreditch produces daily between fifty and sixty tons of dust and house refuse, and for the removal of this to the sea by barging it used to pay 3s. 2d. per ton. The problem for the municipality was to burn the dust to make electric light, and, incredible as it may seem, this is what is being done to-day. But of that dust, the destructor produces steam, and the steam is used to drive a great high-tension engine

But it is only the next step forward that at any time need be taken; and the timid may be assured that he need have to face nothing more revolutionary than the removal from our streets of the elevated roads to make way for better methods of transit, as imagined, without tremor, by ex-Mayor Hewitt, the supply by the city to its citizens of improved air, the legality of which is demonstrated by Judge Barrett ([19]) and free light and transport for our citizens, the prospect of which is philosophically viewed by Mr. Belmont. ([20])

It is only now that our city has so grown as to begin to realize her natural advantages, only now that the widely extended features of our site begin to coalesce into such a grand and beau-

producing 1,100 volts of electricity from each of three generators; there are, besides three low-tension dynamos, each producing 165 volts. The site, which also serves for baths, wash-houses, Central Library, Museum and is very close to the municipal technical school, cost £83,500. The total cost of these different schemes is very nearly £200,000. Now it is evident that dust and refuse will not burn as coal burns. To coax it to burn, there are motor-driven fans which cause a strong current of air to circulate. Dust destruction continues day and night at Shoreditch, twelve men stoking in three shifts of eight hours each, four to a shift. The question was, how to save up the steam generated in the daytime for use at night. This had been achieved by the Druitt Halpin thermal storage system, by which steam passes into a cylinder and is mixed with a small quantity of cold water from the feed-pumps. This steam is supplied to boilers in connection with the dynamos, and by this arrangement the boilers evaporate one-third more steam than would be the case if they were connected with the water-mains.

The vestry clerk calculates that, in view of the large sum formerly paid for the barging of the dust, the saving of fuel for the baths and wash-houses, and the receipts by the sale of electricity, there will be an annual economy of £1,500. This is probably much below the mark. For the purposes of your journal, the vestry clerk communicates the fact that all the electricity the machinery can now yield is taken up, and no fresh customers can be supplied until more machinery is added. Additional engines and gear are now being built.

The electric-lighting station supplies the arc lamps with which Shoreditch streets are now lighted. At midnight these are switched off, and by automatic action incandescent lamps of less power are lighted until dawn. In case of accidental extinction of one set of lamps, the other set will light automatically. The station also lights the town-hall, lights and heats the baths and technical school, ventilates the sewers, supplies electric motor-power to cabinet-makers at specially low rates during the daytime, has entered into a contract with the Electric Cab Company, and supplies every private consumer, dealing tenderly with him in the manner of fittings. It is good to know that workmen's dwellings are being fitted with the Bastian penny-in-the-slot meter; for a penny the poorest home can have an eight-candle-power light for six hours. And, delightful thought, all this light is churned out of dirt!—*N. Y. Evening Post*, August 6, 1897.

([19]) Supra.

([20]) "In some year of the future the effort may be begun to put the city in such comprehensive business as supplying transportation and illumination for a price, as it now supplies water, and as the Federal Government transports and delivers mail matter. It may even be that in future years the city will provide transportation and illumination free of price or fee or rate, and rely on taxes to 'foot the bill.' Highways have been evolved from turnpikes exacting tolls. Nearly all roads and bridges are now free."—Hon. Perry Belmont, N. Y. *Times*, Aug. 31, 1897.

tiful whole as, until the very plan of the continents is changed, can be realized by no other city on earth. "With "its noble harbor protected from injury, and the chan- "nels of approach straightened and deepened; with its "wharves and docks made adequate for the easy transfer "of the vast commerce of the country; with its streets "properly paved and cleaned, and protected from destructive "upheavals; with cheap, easy and rapid transit throughout its "length and breadth; with salubrious and attractive parks in "the centres of dense population; with an ample supply of "pure water, now nearly provided; with a system of taxation so "modified that the capital of the world may be as free to come "and go as the air of heaven, the imagination can place no bonds "to the future growth of this city in business, wealth and the "blessings of civilization. Its imperial destiny as the greatest "city in the world is assured by natural causes, which cannot be "thwarted except by the folly and neglect of its inhabitants."(21)

(21) Message of Hon. Abram S. Hewitt, Mayor, to the Board of Aldermen, 1888.

MUNICIPAL AND PRIVATE MANAGEMENT OF STREET RAILWAYS—A STUDY OF RESULTS AND POSSIBILITIES.

By Edward E. Higgins.

The principal powers which the State may rightly confer by charter upon its municipalities may be grouped in three classes, as follows:

Class I. Primary investment powers.

1. Power to lay out and construct streets and other thoroughfares.
2. Power to construct a sewer system.
3. Power to construct public buildings.

These powers are primary and essential. In their exercise the city creates a "plant," so to speak, and incurs a bonded debt, which may be less in amount than the actual investment if property owners whose holdings are directly benefited by the city's action be assessed for a part of the cost.

Class II. Powers involving public service without profit earning possibilities.

4. Power to maintain, light and clean thoroughfares.
5. Power to maintain the sewer system.
6. Power to maintain public buildings.
7. Power to establish and maintain a health department and to remove ashes and garbage.
8. Power to establish and maintain a police department.
9. Power to establish and maintain courts of justice and correctional institutions.
10. Power to establish and maintain a fire department.
11. Power to establish and maintain a system of public education.
12. Power to establish and maintain public charities.
13. Power to acquire and maintain public parks.

The distinguishing feature of all but the last three functions of Class II are, first, the necessity for constant expenditure with little, if any income and no possibility of self-support, and second, the service of all citizens, directly or indirectly, and to approximately the same extent. A free public school system requires constant expenditure, but does not serve *all* the people, except in the indirect way of bringing about better citizenship, but the injustice of taxing all for the benefit of nearly, but not quite all may safely be disregarded in this case. Public charities are a necessity of civilization and a true burden upon the community. The acquisition and maintenance of parks may be justified not only by the health and pleasure-giving benefits, open to all, but by the certain appreciation in value of park lands as a part of the city's property.

The cost of performing these non-profit earning functions must, therefore, be assessed upon the entire community, unless some revenue-earning capacity can be developed by the municipality, which will act as a credit to reduce these costs. Such revenue-earning capacity is found in

Class III. Powers involving public service with profit earning possibilities.

14. Power to provide for a water supply.
15. Power to provide for a system of public lighting.
16. Power to provide for steam and electric supply service for power and heating.
17. Power to provide for transportation facilities by surface, elevated, or underground railways.
18. Power to provide for transportation facilities by ferries.
19. Power to provide for the transmission of intelligence by telephone, telegraph, compressed air or messenger.
20. Power to provide for a cab service.
21. Power to provide for the transportation of goods by vehicles of all kinds.
22. Power to impose taxes upon private vehicles.
23. Power to provide for market places.
24. Power to provide for the development of water fronts by means of wharves, docks, etc.

The common feature of all these powers of Class III, which brings them clearly within the domain of municipal administration or regulation, is the necessity which is upon each of using some part of the city's plant purchased at the common expense. Water, gas, and steam-supply systems require pipes laid in the streets; electric lighting, power, telephone, telegraph and messenger call systems, require street space for their wires; a railway transportation system calls for tracks, terminals and overhead structures burdening the streets; and vehicular traffic of all kinds, including that by cabs, wagons and private carriages, wears out the people's pavements. The right of a city to establish market places or to construct and own wharves and docks is hardly an inherent one, but when possessed and exercised, rests frequently upon "ancient custom" or royal grants of land or water front. The right to provide for ferriage is on a par with that for railway transportation in the streets, since the water thoroughfares of all cities possessing them are usually maintained only at considerable public expense.

Now, by no school of political theorists would it be denied that the whole community, which has built the city's plant and which is taxed to pay for its maintenance, should derive compensation in some form for all burdens placed upon this plant in the performance of services rendered to a portion only of the community, or to certain classes more than to others. The real question is, therefore—In what way can this compensation best be obtained?

In the first place, consistency does not require that all these powers be exercised by the city in the same way. There may be special reasons why a municipality may wisely decide to perform certain functions on its own account and allow others to be done for the people by private capital. A good and sufficient water supply, for example, serves the entire community and is essential to its health and to the city's prosperity. It would sometimes be difficult, and perhaps unwise, to give into private hands the powers necessary to properly protect such a water supply at its sources, and the argument may occasionally be urged, with some plausibility, that it would be dangerous to leave in private hands such a tremendous power for good or evil to a city. Moreover, most cities, are, themselves, the largest individual consumers of

water, and questions of municipal economy in expenditure naturally have an important influence in shaping policy.

The question of how best to handle public lighting in its various forms stands, too, on a basis different from all the functions of Class III, except the first, inasmuch as here, again, the city is itself a large purchaser of light. The problem of how best to do its own work—whether directly or by the contract system—is one which confronts a city at every turn, and is to be decided, in general, on the basis of comparative economies. Theoretically, there ought to be no possibility of saving the people's money by municipal ownership and operation of a lighting plant strictly limited in capacity to the city's needs, for, apart from all other considerations, the natural economy in production on the larger scale required for commercial and municipal necessities together, ought always to be sufficient to insure prices lower than the bare cost of production in the smaller plant required for municipal purposes alone. Where this theoretical condition does not obtain in practice, the problem of dealing with public lighting may be solved by the establishment of separate plants for municipal lighting alone—an economic absurdity as far as gas supply at least is concerned—or it may be argued on the broader question of public and private ownership of the entire city lighting system, commercial and municipal.

But when we come to such public service functions as railway and ferry transportation, telegraph and telephone service and vehicular traffic, we find that these are essentially different from water supply and lighting, in that no municipal corporation is a user of these services to an extent which would justify it in performing them itself as a measure of economy in expenditure, and in that a portion only, and not the whole of the community is reached by these services.

In short, it does not follow by any means, as some would-be leaders of opinion would have us believe, that the growing agitation for municipal control of all public service industries is merely a logical development of the success which may have been found in the control of one or two of them. It is true, however, that those who advocate municipal management of transportation agencies, telephone and telegraph systems, etc., on the ground, either that the use of the city's plant is necessary, or that they are na-

tural monopolies which should not be given into private hands, are logically bound to go still further and demand that the city shall own and operate all cabs, wagons and carts, a steam and electric power supply system for factories, a district messenger service, and every similar agency of living which may, directly or remotely, use the facilities which the city has provided for the transaction of business and the comfort of the people. Moreover, these advocates must go even farther and demand that such railroads, telegraphs and steamships as use facilities of any character the cost of which has been paid by the public, should be owned and operated by the national or state governments—and the step from this to common land ownership and to pure socialism is a short one.

He who advocates the municipalization of one public service industry while opposing others, may do so consistently, however, if his argument be that the city should own and operate all profitable, or excessively profitable industries of this kind, while leaving to private capital all unprofitable or but slightly profitable ones. In other words, the economic argument as applied to any particular industry is a good one—it is, as a matter of fact, almost the only one used in practice—and it is entitled to respectful consideration, though I do not by any means admit that it should be, by itself alone, a controlling factor in determining municipal policy—certainly if "economy" be defined narrowly as a direct money saving in dollars and cents. As a matter of fact I presume that all, or nearly all honest advocates of municipal ownership and operation will admit that excessive, and not merely moderate, profits must be clearly shown in any particular case under consideration, if the economic argument alone ought to prove effective in bringing about a change of policy from private to municipal responsibility in matters involving such complexity and technique as are found in the management of public service industries.

I now leave this general discussion of municipal functions for a special one on the relations between street railways and municipalities, and first of all, in deference to those who wish to measure all values by the standard of dollars and cents, I will take up the economic questions involved.

The public in general has a greatly exaggerated idea of the profits of street railway operation. It has seen the capitalization of American street railways suddenly expand, during the last ten years, from $400,000,000 to $1,400,000,000; it has seen individuals and syndicates derive large fortunes from street railway manipulation in our principal cities; it has seen that these fortunes are made possible by the possession of franchises given to these individuals and syndicates by the people's chosen representatives; and it forgets entirely that speculative, market or par values, are not necessarily real ones, as measured by earning power, and that in a period of railroad building and inflation, confidence and hope in coming profits always exceed realization.

In its belief in excessive street railway profits the public has been confirmed by pronouncements on the subject by "Citizens' Committees" and other public-spirited bodies, formed for the most part with excellent intentions and entire honesty of purpose, but composed chiefly of men who refuse to spare from their own affairs time sufficient to thoroughly investigate the questions upon which they vote so confidently in "Committees of One Hundred." The circular letters of such committees are often almost amusing, or would be, were not the results sought to be obtained of such tremendous consequence. Take, for example, the two opening paragraphs of a circular issued by the recently formed "Association for the Public Control of Franchises," of New York City, under date of July 17, 1897.

"According to the most conservative authorities, half the city's revenues could be derived from its street car, gas, and other franchises. In this event, taxes upon private and personal property would be cut in two.

"What is even more important to the mass of our citizens, public control of the means of transportation and illumination will lead to a similar reduction in car fares and gas bills."

Are we to suppose that the esteemed president of the association issuing this circular is *personally* aware that the amount of money now raised by taxation in the city of New York is nearly or quite $45,000,000 per annum, while the entire net earnings (applicable to interest and dividends) of the surface and elevated railway, gas and electric lighting properties do not exceed $18,000,000 per annum, of which by far the greater part would be consumed in paying interest—even with New York City's credit—on the lowest sum at which the city could possibly secure the

tangible assets of the different companies if purchased on appraisal by unbiased judges of values? Or can we believe that the association's vice-presidents, would be willing to *individually* engage to so handle the city's finances and operating properties as to cut *both* city taxation and street railway, gas and electric light charges in two, under these conditions? Or must we not charitably conclude that for none of these busy gentlemen has it been possible to personally investigate and revise the statements appearing over their names as committee members?

Another example of the way in which public sentiment is sought to be manufactured by certain kinds of reformers: The city of Chicago furnishes an asylum for a "Three Cent Fare Association," one of whose assets is an "Educational Committee." This committee was also moved, not long ago, to circularize the public on the subject of street railway fares, and an extract from its circular reads as follows:

"Taking the accounts as furnished by the 'combine' officers (of Chicago) it shows the net earnings are 30 per cent. of the gross receipts, or, otherwise stated, 30 per cent. of every nickel collected is profit. Thus, their books show it costs 3½ cents to carry each passenger, the profit on which is 1½ cents, or 43 per cent. added to the cost. Conceding the 'combine' should be allowed its alleged 3½ cents of cost, with 7 per cent. added for profit, the cost to the people would then be 3¾ cents each ride, or an equivalent of seven rides for 25 cents. Should not a general ordinance be passed regulating the rate of street car fares?"

Indeed! The "combine" is to be generously allowed a "profit" amounting to 7 per cent. *of the operating expenses*, as a return on an investment equivalent to from five to ten times those operating expenses!

It is almost inconceivable that such utter ignorance of the simplest business principles should be found among men behind public movements of any kind, and the conclusion is forced upon us that office boys or clerks are allowed to do the "public work" of many of our business men.

* * * * * * * *

A bit of street railway history, and an explanation of the true practical meaning to investors and would-be investors (including municipalities) of street-railway capitalization, earnings, operating expenses and profits applicable to return on investment, will perhaps help the layman in street railway affairs to better understand the technicalities of a somewhat difficult subject and to form a

clear idea of the relative merits of different proposed solutions of the problem under consideration.

The street-railway industry was a small one indeed prior to 1870, and was limited to horse-railway lines in a few of the larger cities. From 1870 to 1880 came the first efforts to bring about improvements in motive powers, several of the hill lines in San Francisco being equipped with the cable system in that decade. A few years later the cable system was adopted in other cities and the early experiments in electric traction began. In 1888–97 has come the electric era.

The old horse railway properties were not, as a rule, overcapitalized. Many of them were really undercapitalized on account of the fact that earnings were frequently put into extensions of mileage instead of into dividends on stock. In the larger cities of the country, these horse-railway systems were quite profitable, one reason being that the lines were operated only on the main streets and the companies took no chances of possibly unprofitable extensions. In cities of moderate size also, the horse railways, by dint of close management and condensed mileage, managed to make fair profits gauged by percentage dividends on investment, but operation was on so small a scale that the total amount of profits involved was small and was likely to disappear at times. In the smaller cities and country towns street railway properties were practically valueless from a profit-earning point of view. Averaging street railway operation in cities of all sizes in New York State and Massachusetts, it is found that in 1885, the New York properties showed apparent net earnings of 8.8 per cent. on the total investment, and the Massachusetts properties 6.6 per cent. For reasons which will presently appear, these apparent rates of return were, in reality, considerably too high.

Electricity took the street railway world in America by storm. Extravagant estimates of the possibilities of operating profits served as a basis for extravagant ideas of capitalization. Syndicates were formed to purchase horse railway properties and equip them with electricity, and these syndicates were forced to pay high prices for assets whose value largely disappeared with the adoption of electricity. The electric manufacturing companies, two or three only in number, were taxed to the utmost to furnish apparatus rapidly enough to supply their would-be customers,

and as a result of this urgent demand and of the heavy cost of experimental work and manufacturing processes necessary in a new industry, the prices charged by them for apparatus were very large—five to eight times present prices—while the apparatus itself was poor and inefficient as compared with the types common to-day. Similar pressure was brought to bear upon car builders, rail-rolling mills and other manufacturers of street railway material, and with similar results, both as to prices charged and imperfection of product. Taken almost by surprise, the mill owners and manufacturers found that they must devise new types to meet a host of varying conditions, and must do it under pressure. Millions upon millions of dollars have been honestly but vainly spent in the endeavor to provide a roadbed suitable for electric traction, the early belief that 50 to 60 lb. girder rails mounted on chairs would be stiff enough for all requirements, having given way to the reluctant admission that our present 80 to 90 lb. standards are necessary. Millions upon millions more have been spent by the street railway companies in teaching the manufacturers that their motors were too weak and their dynamos too small for economical operation. The money wasted in this field, and wasted entirely legitimately—since managers bought the best they could get and none had experience—is almost beyond belief. Joined to this has undoubtedly been real and attempted overcapitalization of costs, which has not always been successful, owing to the necessities for money brought about by the waste investment already described.

Out of this chaos of changing conditions our street railways have come forth burdened with capital liabilities averaging for the United States $95,000 per mile of track, of which about $41,000 is in funded debt and $54,000 in capital stock. The amount of real overcapitalization of cost is, of course, impossible to obtain with any approach to accuracy, but from a somewhat intimate knowledge of the way in which these capital liabilities have in general been created and from the fact that many, if not most of our street railways have been obliged to incur more or less large floating debts in addition to their stock and bond issues in order to provide for the necessary changes in roadbed and equipment brought about by "improvements in the art," I am inclined to believe that the

total amount of "water" in American street railway securities hardly exceeds one-third their total par value.

We frequently hear it said of some local street railway system that "It is heavily overcapitalized. An engineer thoroughly familiar with the facts states that the cost of duplicating its tangible assets would be but half its stock and bond issues." Such an argument, used for this purpose, and in the light of the above statements of fact regarding the destroyed horse railway investment and high prices for apparatus and material in the old days of electric railroading, is obviously unfair and demagogic. So long as managers are fallible and their judgments imperfect, so long will all industries be burdened with waste investment, which is none the less, however, true investment and rightly to be capitalized. The public may properly seek to prevent genuine overcapitalization of costs in order to make sure that excessive operating profits be not concealed by such overcapitalization, but it has no right whatever to attempt to scale down the capitalization to the basis of cost of duplication, or to found arguments for imposition of additional burdens of taxation on such a flimsy substructure.

We now come to street railway earning power. Here I am prepared to make a broad statement of fact, which can hardly be successfully controverted.

The true earning power of nine-tenths of our street railway properties is far less than their apparent earning power.

The net earning power of any operating property for a series of years is that part of its gross receipts which remains after all operating expenses (including taxes) have been paid, together with all contingent losses of any kind not properly chargeable to operating expenses. In other words, the net earnings in order to be truly such, must be properly applicable to return upon the investment.

The operating expenses of a street railway enterprise are usually sub-divided into four main classes: "General Expenses," "Transportation Expenses," "Maintenance of Way and Buildings," and "Maintenance of Equipment." The first two classes ordinarily include direct annual expenditures only, which are easy to ascertain when once incurred and not difficult to estimate for future years, except that they include contingent losses by fire and for "damages for accidents to persons and property," which losses are decidedly

variable in amount. The two maintenance classes are of an entirely different order, since to them should be charged not only the direct expenditures for repairs from year to year, but also a certain amount for renewals or for a measure of that depreciation of plant and equipment which will, in course of time, make renewals inevitable. In other words, the actual operating value of the tangible assets, plus any sums held in the treasury to balance depreciation must be at all times equal to the original investment before returns can be properly made upon that investment. The necessity for such a balance to depreciation in the form of a "reserve fund," "depreciation fund" or an account with "deferred operating expenses" is evident, and such a fund should, theoretically at least, form an integral part of any correct financial system.

With long-established enterprises, however, such as are found in the steam railroad field, the amount of money per annum which it is necessary to put into the property in the form of renewals in order to keep it up to its original condition, becomes reasonably constant after many years of operation, so that cash depreciation funds of the kind described are not always needed. Nevertheless, their necessity has been proven in innumerable instances in the history of steam railroading, as may be inferred from the fact that but few American railroads can now be found which have not at some period of their career passed into bankruptcy and been forced to provide for urgently needed "improvements" upon their property by the raising of new supplies of capital—"earnings" having been paid out too liberally to stockholders in the early days of the undertaking. In Europe, depreciation is always taken care of by an annual charge upon earnings, and the management of any industrial enterprise would be considered "wildcat" indeed did it not establish amortization funds for this purpose.

In any new enterprise, particularly in the electric railway field where the total experience with a new form of motive power has extended over a period of less than ten years, it is necessary to form some estimates in advance of what the depreciation is likely to be throughout a term of years, and to set aside out of earnings the sums necessary to balance this depreciation, charging them, of course, to "operating expenses" and thereby raising the apparent percentage of operating expenses to receipts found in the

earlier years of the operating period, to somewhere near their true *average* figure.

Net earnings applicable to return on investment are not always equal to the earnings from operation, *i. e.*, to the difference between the gross receipts and the true operating expenses. A limited time franchise, for example, may easily involve a contingent loss at the end of the franchise period in the disposal of the property or its transfer to new owners, in case a renewal of franchise to the original owners is refused. This loss must be estimated as closely as possible at the beginning of the operating period and amortized by an annual charge on earnings, if capital is to remain intact. This annual charge may easily be a very large one if, as is the case with many of our electric railways, the original investment was made in the purchase of an old horse railway system for equipment by electricity, since these old systems were usually bought, as before stated, at a large price placed on their then earning power, whereas their assets available for electric traction were but a small percentage of this price.

This statement of the principles underlying a correct system of street railway finance may properly be supplemented by an "illustration drawn from real life" in order that the relative importance of these profit-determining factors may be grasped.

A certain American street railway company has been operating about six years under franchises which have thirty years yet to run. The original cash cost of its roadbed, power plants, buildings and equipment, was about $5,000,000, to which must be added an investment of about $2,500,000 in previously existing horse railway properties which formed the backbone of the present much larger system. This investment of $2,500,000 is properly chargeable to "franchises" under the new conditions, though representing "plant and equipment" under the old.

To-day the roadbed and rolling stock are in comparatively poor condition. The company's engineers estimate that not less than $1,750,000 of new money would be required to put the property in good condition according to modern standards, and that a "perfect plant" to do the same work as that which cost $5,000,000 originally would cost, at present prices, but $3,500,000. Here, then, is an absolute destruction of capital investment amounting to $3,250,000—considerably more than the total apparent earn-

ings from operation of the six-year period. "How can this lost investment be regained?" is the legitimate inquiry of the investors.

Let us assume, what is actually the case, that capital has received in interest (no dividends) during this six-year period a moderate return only for its use, averaging as a matter of fact, hardly four per cent. per annum. Let us assume that the investors decide to follow their engineer's advice and put their hands deep in their pockets for the additional $1,750,000 required to modernize their plant and equipment so as to give it greatest earning power. May they not be pardoned if, in this particular case, they capitalize this new money, by adding it, on their books, to their original investment, and demand of the management of the rejuvenated property that it so handle its trust as to pay back to the investors at the end of the thirty year franchise period $9,250,000 of unimpaired capital together with whatever annual return can be made on this investment? This may not be ultra conservative bookkeeping, but it is common sense."

What will be this annual return?

The gross earnings of the property in its present imperfect physical condition are about $1,250,000. With a perfect roadbed and equipment we may strain a point and assume gross earnings of $1,500,000 for the first complete year under the new conditions.

The company's "General Expenses" for the past two years averaged about $150,000 per annum Under the new conditions they will be about $175,000 per annum, the principal increases coming in taxes, accident insurance and miscellaneous general expenses.

The company's "Transportation Expenses" at present average about $525,000, but under the new conditions will be reduced to about $500,000, the principal decrease being found in operation of power station where the modern apparatus will prove more economical than the old.

The average cost of "Maintenance of Way and Structures" during the last two years was about $50,000, and of "Maintenance of Equipment" about $100,000, these sums nominally covering both "repairs and renewals," but in reality very little of the latter element of maintenance. They are entirely too low, as will

readily be understood from the following table and discussion. In this table the cost of each class of apparatus making up the entire plant and equipment is carefully estimated on the basis of present prices and standards and on the assumption that the expenditure of the $1,750,000 of new money has brought up the total value of the tangible assets to that of a "perfect plant," estimated, as above, at $3,500,000.

	First Cost. 1897.	Life in years.	Salvage.	Net Cost of Replacement.	Average Annual Cost of Repairs.	Renewal Fund.	
						Total.	% First Cost.
Roadbed	$1,875,000	10	$187,500	$1,687,500	$31,250	$134,142	7.2
Overhead and underground construction	450,000	15	52,500	397,500	31,250	18,419	4.1
Car bodies	244,000	15	None.	244,000	27,500	11,306	4.6
Motor trucks	263,500	10	13,175	250,325	71,790	19,898	7.6
Steam plant	225,000	15	22,500	202,500	9,000	9,383	4.2
Electric station plant	60,000	25	6,000	54,000	2,400	1,131	1 9
Buildings	350,000	Repairs and renewals ½ per cent.			875	875	.....
Miscellaneous equipment.	32,500	10	None.	32,500	2,500	2,583	7.9
Totals	$3,500,000	....	.....	.....	$176,565	$197,737	.....

The first step in the process of obtaining a true measure of "maintenance" is to determine the probable life of each kind of apparatus ; the second step is to determine the the average annual ordinary *repairs* during that life ; and the third step is to determine the sums which should be passed to a reserve or depreciation fund each year, in order to provide for the *replacement* of each class of apparatus at the end of its estimated life.

Without going too much into detail in explaining the figures of this table, the idea will be clearly seen by taking the single item of "roadbed." In the first column is given an estimate of the present cost ($1,875,000) of building for this system a "perfect" roadbed according to modern standards. It is assumed that this roadbed will have a life of ten years, though the exceptionally severe and frequent service always given with electric traction in city work has so far proved more destructive to track than this life would indicate, and so long a life is possible in this particular city only with heavy girder rails and the best construction throughout.

During this ten-year life assumed, the average annual cost of repairs necessary for keeping the track in fair operating condition can hardly be less than $31,250, a figure based, in the estimates, on track mileage, but less than 2 per cent. of cost.

At the end of its life, when the track must be taken up and the rails and ties replaced with new, a salvage of 10 per cent. may possibly be realized from the sale of rails as "scrap." The net cost of replacement to be amortized becomes, therefore, $1,687,500.

It is to provide this replacement money that the reserve fund is to be established out of earnings, and by a simple calculation on actuarial principles it is found that $134,142 set aside each year and allowed to accumulate at 5 per cent. compound interest will amount in ten years to the $1,678,500 required. This sum added to the average annual cost of repairs, amounts to a total maintenance and depreciation account of but 8.9 per cent. of the original cost of roadbed, which is considerably less than the percentage usually estimated by engineers upon roadbed.

The other items in the table being treated in a similar way, we have a grand total of $374,302 as a reasonable estimate of that highly uncertain element of "repairs and renewals," and one constructed in a somewhat more scientific and convincing way than can be done by the ordinary "guesswork" percentages where the favoring influence of compound interest is not taken into account.

Note this—that an item practically lost sight of in American street railway finance, the item of depreciation, is practically equal, under the best conditions of modern roadbed and equipment assumed, to the entire average direct expenditures for ordinary repairs covering a series of years, and is therefore considerably greater than the direct expenditures during the first few years of operation when everything is comparatively new and in good condition. Note also that the combined maintenance charges —the "repairs and renewals"—amount for this particular plant to a little over 10 per cent. of the valuation, at present prices, of its tangible assets and to 25 per cent. of the assumed gross receipts. The bearing of these two percentages will presently appear.

The true operating expenses are thus, in round numbers, $1,050,000, or about 70 per cent of the gross receipts, and the true earnings from operation are $450,000. These are not yet, however,

the net earnings applicable to return upon investment, for a *pro rata* proportion of the loss to be realized at the end of the thirty year franchise life must first be provided for.

This lost investment may be assumed to be $9,250,000, less $3,500,000, or $5,750,000, if we can safely estimate that the plant and equipment can be sold to new owners thirty years hence for a sum which, together with the funds held in reserve to balance depreciation, will amount to the present valuation of a "perfect plant." This is hardly certain, by any means, but is a convenient assumption for present purposes.

Now, to amortize in thirty years this investment loss of $5,750,000, it will be necessary to set aside at 5 per cent. compound interest, the sum of $86,500 per annum, and this is a true "fixed charge" against the earnings from operation. The net earnings applicable to return on investment become, therefore, $363,500, a sum less than 4 per cent. upon the investment—*provided*, that, within the whole thirty year period, fire or accidents do not cause large uninsured losses impossible to foresee; that the municipality do not again raise tax rates or impose other and heavier burdens upon the enterprise; that the engineers have properly estimated the depreciation; and—most harrowing proviso of all to the worried and anxious street railway manager—that the ever active and utterly inconsiderate inventor do not effect improvements in the art of street railroading, which will play havoc with all these estimates, and render new expenditures of money a necessity. Contingencies of this nature may be confidently relied upon to more than neutralize any probable increase in earning power, caused by growth of cities, and are among the influences which make it impossible to get well informed investment capital for street railway enterprises at low or even moderate rates of interest—and which will operate just as effectually to wipe out the profits of street railway plants owned and operated by municipalities as of those owned by private parties.

It may be said that this illustration must represent an extreme case, not possible to duplicate elsewhere. On the contrary, it is by no means unusual. Here is a table, made up with great care and without prejudice or selection, showing certain operating features of twenty American street railway systems of the first class in magnitude of operation. No particular order of arrange-

ment is followed, as identification is not necessary or desirable for present purposes:

Case No.	% Operating Expenses to Gross Receipts.	% Earnings from Operation to Capital Liabilities.	% Maintenance Charges to Capital Liabilities.	% Maintenance Charges to Gross Receipts.
1	60.4	5.0	2.0	15.7
2	58.5	6.0	1.9	18.0
3	51.1	3.7	.7	9.0
4	61.9	3.9	1.1	11.0
5	80.0	6.8	10.6	31.1
6	65.5	5.2	1.1	7.2
7	59.6	5.5	1.1	8.4
8	65.7	9.9	...	...
9	61.3	4.9	...	...
10	60.2	5.0	...	...
11	47.8	11.0	...	...
12	58.0	4.6	...	...
13	61.3	4.0	...	...
14	66.1	3.6	...	...
15	63.9	6.2	...	...
16	65.9	2.9	...	...
17	58.3	4.3	...	...
18	50.9	5.3	...	...
19	63.4	3.2	...	...
20	61.8	3.3	...	...

Here are twenty properties, none earning less than $1,000,000 gross per annum. Their aggregate capitalization in bonds and stock outstanding is nearly $500,000,000; their aggregate gross receipts are about $67,000,000; their apparent operating expenses (including taxes) are about $42,000,000, or 63 per cent. of the gross receipts; and the percentage of apparent earnings from operation to the total capitalization is, in the aggregate, almost exactly 5 per cent.

"But these properties are overcapitalized" it will be said.

Admitted.

Suppose I admit, too, *for the purpose of this argument only*, that the overcapitalization is 100 per cent.—that the real accumulated cash investment in all these properties is not $500,000,000, but $250,000,000! This certainly would seem to be an admission sufficiently sweeping to suit any critics.

The result is only this, that the apparent net earnings would be equivalent to a return upon investment of 10 per cent., instead of 5 per cent. Is this larger figure "extortionate," "excessive," or "outrageous" for risks so great as those which have to be taken by investors in street railway properties?

This is not all. These twenty properties are not now in reality earning 5 per cent. on their $500,000,000 of capital liabilities, or 10 per cent. on half this amount. Look at the percentages of maintenance charges to gross receipts and to capital liabilities of the seven properties for which they can be obtained, and at the percentages of operating expenses to gross receipts in all! Case No. 5 is an exception among these properties, in that it is not overcapitalized, its maintenance accounts are sufficient and its percentage of earnings from operation to total capital liabilities can probably be maintained in the future. But it is safe to say that hardly one of these properties, except case No. 5, can be permanently operated at the percentages to gross receipts given in this table.

* * * * *

If these things be true, how are three cent fares possible in Toronto and Detroit?

"Three cent fares" in Toronto do not mean a general three cent fare rate, by any means. The contract between the city and the company reads as follows regarding fares:

"Single (cash) fares are to be five cents each.

"Fares on night cars (12 midnight to 5:30 A. M.) are to be double the ordinary maximum single fare rates.

"A class of tickets must be sold at the rate of eight for twenty-five cents to be used only by passengers entering the cars between the time the day cars commence running and 8 A. M. and between 5 and 6:30 P. M.

"A class of tickets must be sold at the rate of twenty-five for $1, and another class at the rate of six for twenty-five cents (good at all times).

"Children under nine years of age are to be carried at half fare rates and infants in arms are to be carried free; school children are to have school tickets at the rate of ten for twenty-five cents, only to be used between 8 A. M. and 5 P. M. and not on Saturdays.

"Police constables in uniform, detective police officers in the employ of the city, and (while a fire is in progress) members of the city fire department in uniform, shall be carried free."

The actual average rate of fare paid by Toronto citizens under this schedule was, in 1896, 4.24 cents per passenger—a very different thing from three cents.

The Toronto Railway Company pays to the city under its contract 8 per cent. of its gross receipts up to $1,000,000 per annum ($997,273 in 1896) and $800 per mile of track per annum (84 miles at present). Its total payments in 1896 were, therefore, approximately $150,000.

It is possible for the company to make these payments, to establish the schedules of fares described above, and to make fair profits for its stockholders, for the following reasons among others:

1. Because Toronto is small in area and the population density large as compared with American cities of about the same population.

2. Because it is theoretically possible to serve a city of this area with less mileage and less cars than a city whose population is more "spread out."

3. Because, as a matter of fact, the Toronto system is much smaller in size and operates less cars than American systems serving the same population.

4. Because the Toronto Railway Company is granted exclusive rights for street railway operation within the city limits and can therefore lay out its lines to the best advantage from a street railway point of view without fear of competition.

5. Because in a system so laid out, in a territory of this kind, the average length of ride per passenger is comparatively small.

6. Because, in consideration of the franchise payments described, the company is relieved of all other burdens of taxation (except school tax), including original cost of pavements, even between the tracks, and their annual maintenance—all of which is undertaken by the city.

7. Because at the end of the thirty year franchise period, the company has rights of property which the city and any new lessee are bound to respect.

8. Finally, because the Toronto installation was made at a time when electrical apparatus and equipment material were fairly good, so that the waste investment has been less than usual.

In substantiation of certain of the above statements the following table is submitted:

City.	Population.	Area Square Miles.	Population per Square Mile.	Track Mileage.	Cars Owned.
Omaha.	140,452	24.0	6,000	110	291
Toronto....	160,141	10.5	15,000	84	300
Louisville.....	161,129	13.9	11,500	150	500
Minneapolis.....	164,738	54.0	3,000	122	558

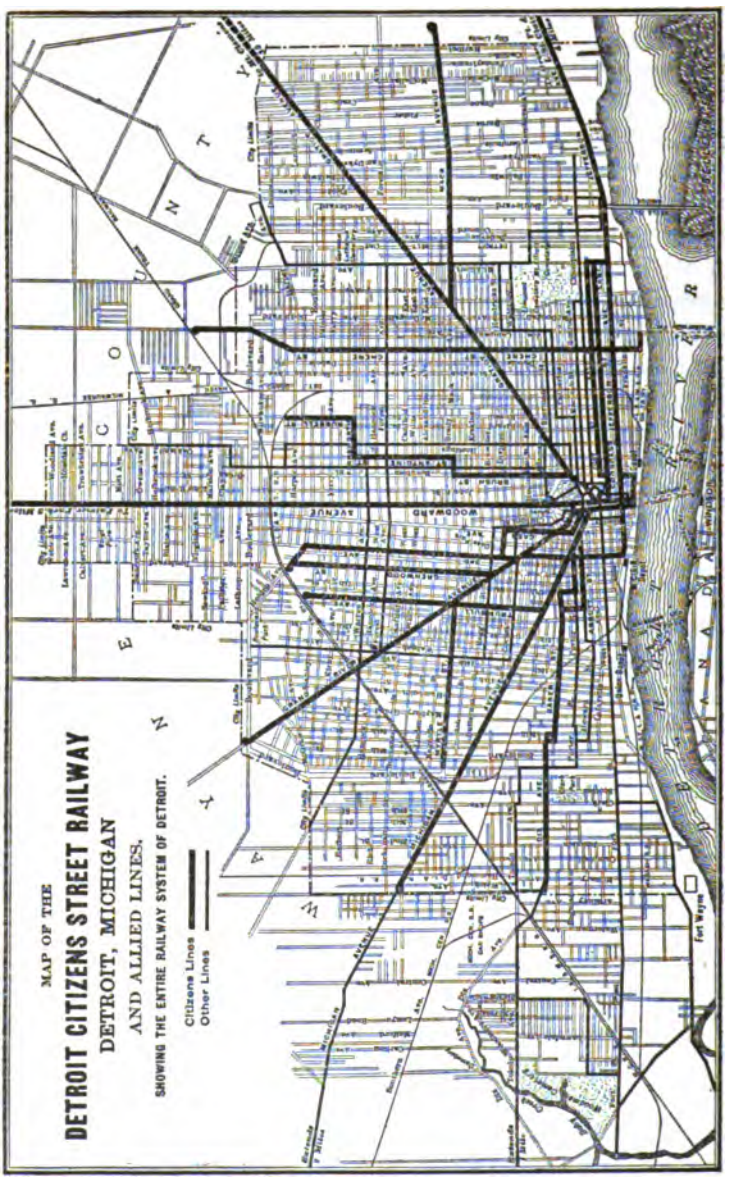
"Three cent fares" in Detroit served their real purpose in converting a Mayor of Detroit into a Governor of Michigan. They might have been, also, a financial success had the element of competition been absent. The "Detroit experiment" is well worth explaining on account of the possibility that similar ones may be tried in other cities with equally unsatisfactory results.

For several years prior to 1894, one of the street railway companies of Detroit, operating in its principal streets, had been engaged in a bitter contest with the city about its franchise rights and obligations. The company had been uniformly successful in the courts, but its victories were hollow ones, since public opinion, always so ready to pronounce against corporations, had found a verdict of "guilty," and cared not for law nor vested rights.

The city government, headed by Mayor Pingree, attempted to force this company to reduce rates of fare to three cents, and claimed in support of this demand that street railway profits were excessive at a five cent rate. The company proved that it was financially impossible to do what was asked of it, in view of its large accumulated investment for horse and electric operation, and its legal right to charge a five cent fare being upheld by the courts, the city was again defeated.

In December, 1894, a syndicate of capitalists, including several formerly interested in the Toronto Railway Company, was granted by the city the right to build a 60 mile electric railway system in direct competition with the old company. The contract with the city specified:

1. That the company should charge a five cent cash fare; should issue tickets good between 5:45 A. M. and 8 P. M., at the rate of eight tickets for twenty-five cents; should issue tickets good between 8 P. M. and 5:45 A. M. at the rate of six for twenty-five cents; and should issue tickets for police and fire department use at the rate of fifty cents per 100 (in books).
2. That no taxes on earnings should be paid by the company, but that taxes on the company's real estate and


MAP OF THE
DETROIT CITIZENS STREET RAILWAY
DETROIT, MICHIGAN
AND ALLIED LINES,
SHOWING THE ENTIRE RAILWAY SYSTEM OF DETROIT.
Citizens Lines
Other Lines
WOODWARD AVENUE
Fort Wayne

personal property should be levied as on a private individual.

3. That the city should do all paving, repaving and repairing of pavement over the entire street.
4. That the city should have the right to purchase the company's plant and equipment at the end of thirty years at a valuation to be reached by appraisal.

Now this was not, to all appearance, a particularly difficult contract to fulfil, and Mayor Pingree can hardly be accused of driving a sharp bargain with the new company. The latter came into the market for equipment at a time when it was able to purchase modern apparatus and material at almost the lowest prices ever known; it was not obliged to lay a foot of pavement nor to pay taxes on earnings; it had no burden of waste investment to labor under; and, more important than all perhaps, its lines were so laid out as to make its regular, everyday patronage a short distance one, while it might reasonably expect to obtain an average fare of at least 3½ cents.

The fatal defect in the plan lay in the assured competition of the old company. The latter held a superior strategic position in the struggle for traffic not easy to overestimate. A glance at the accompanying map will show clearly how the system of the old company radiates from the business district in nearly straight lines, while that of the new turns and twists indirectly to reach practically the same termini. Add to this the fact that the streets of the old company were, naturally, the best in the city from a street railway point of view, and it will be seen how completely at its mercy would be the new company, were the rates on the old temporarily reduced to the lower level. Lost traffic would be almost immediately regained under such circumstances, for, no matter how strongly the public sympathizes with a new company in its fight against a "grinding monopoly," a majority of its individual units will not long express their sympathy at considerable personal inconvenience in daily life.

The inevitable result of such a condition is:

1. Consolidation, or common ownership of the rival system.
2. A street railway system "overbuilt" for the city's needs.

3. Necessary reduction, or abandonment of service on the least profitable routes.

4. Rigid economy in expenditures, possibly leading to deterioration in service and surely to caution in making suburban extensions.

In Detroit these results have come about, and the companies have been financially fortunate in having settled their difficulties and formed a practical consolidation without a "rate war"—a thing which permanently benefits no one in the long run. The two companies are still operated independently (after a reorganization of the new company), but the latter is understood to be controlled by the old company.

It is worthy of note, in passing, that with general popular sympathy in its favor, the new company earned in 1896 $6,800 per mile of track, as compared with $10,400 per mile earned by the old company. In the first three months of operation the new company received, on an average, 3.46 cents per passenger carried, its ticket receipts being about 78 per cent. of the total. At the present time, however, the proportion of the company's ticket sales to the total receipts is much smaller, and it has been found that the poorer classes, and not the more prosperous, are the ones who pay the five cent cash fare most frequently. The company's cars earned in the first three months barely 12 cents per car mile, a very low figure, with which compare the Minneapolis system, which earns from 18½ cents to 21 cents per car mile, the Boston system which earns over 31 cents per mile, the Chicago system earning 23 cents per car mile, and many others large and small. For its first year of operation, the company's percentage of operating expenses to gross receipts was 67.7, this figure covering practically no charges to maintenance, everything being new and in good condition for operation.

* * * * *

We look this country over in vain to find a single example of municipal ownership and operation of street railways. In Canada there is one example, found in Port Arthur, a town of 2,700 inhabitants, which owns an eight mile line on which four cars are operated. In Germany, the world's center of advanced socialistic thought, there are but four cases, and these among the smaller

towns, such cities as Berlin, Hanover and Hamburg being served by private companies. In Switzerland there are three cases of operation by cantons. In France, Austria, Hungary, Belgium, Italy, Russia, Spain and Holland, cities have apparently no intention of assuming operating responsibilities in this direction.

In Great Britain there are six cases of municipal ownership and operation of "tramways," as against about 125 privately controlled. One of these six cases, that in the city of Glasgow, is worthy of special study, while the others are not; in three instances because municipal operation has but just commenced and no valuable results have yet been obtained, and in two, because operation is on an extremely small scale. The following table may be of interest, however, as showing what is being done in these five cities. *

Town.	Population.	Miles Road.	Total Capital Investment.	Gross Receipts.	Operating Expenses.	Earnings from Operation.	Per Cent. Return on Investment.
Blackpool.....	6,100	4	$276,865	$ 49,345	$ 34,425	$14,920	5.4
Huddersfield..	95,422	20	681,390	187,055	105,560	81,495	4.6
Leeds.....	367,506	17	622,730	289,240	230,070	59,170	9.5
Plymouth.....	84,179	4	No information obtainable.				
Sheffield	324,243	9	606,325	111,840	75,235	36,605	6.0

The city of Glasgow, Scotland, is the one example of municipal ownership and operation of street railways to which advocates of this municipal policy are accustomed of late to point as a practical and apparently successful demonstration of their theories. In 1894, the Corporation of Glasgow obtained from Parliament the powers necessary to "take over" the lines of a private tramway company, whose twenty-one year rights were then expiring, and to operate these lines on its own account. The experience so far gained (up to May 31, 1897) has covered a period of two years and eleven months, and is for horse operation only.

The Glasgow tramway system is an example—all too rare—of a municipal enterprise managed with honesty, skill and intelligence, and strictly in the interests of the public, so far as those interests are understood by the public itself. Its general manager, John

* Conversions from pounds sterling to dollars are on the assumption that £1 = $5.00.

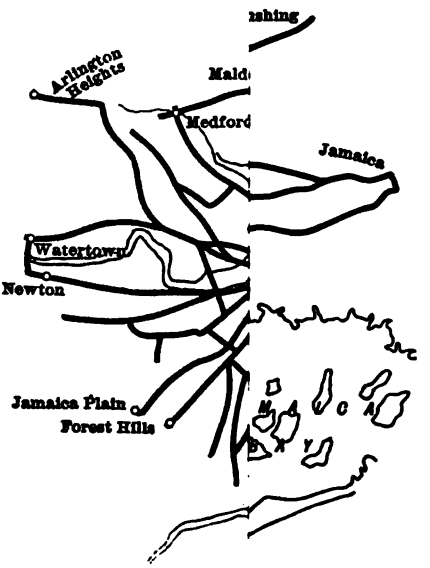
Young, is a broadminded and progressive man, who would gladly develop the municipal tramway system on broader lines than the conservatism of the public at present allows. The schedule of fares in Glasgow is on a basis of distance traveled, the highest fare being 3d. (six cents) for a maximum ride of about six miles. Until the purchase by the city of the old tramway system, the minimum fares were two cents for a distance of about one mile, but the municipality has reduced this minimum fare to one cent per one-half mile. This action has been quite generally misunderstood in this country, being taken by many to be an actual reduction of fares to one-half former rates.

Let us look a little more closely into this matter of fares. The city of Glasgow, with its suburbs, covers an area of nearly 23 square miles, and its population contained therein is about 800,000, the population density being, therefore, about 35,000 per square mile. The two American cities corresponding most closely to Glasgow in population are Brooklyn, N. Y., and Boston, Mass. The former, including Long Island City and other suburbs within a five cent fare limit, contained about 900,000 inhabitants by the census of 1890, distributed over an area of about 45 square miles, and having, therefore, a population density of about 20,000 per square mile; and the latter, with its immediate suburbs, contains about 700,000 inhabitants, distributed over an area of 122 square miles, and having, therefore, a population density of 5,700 per square mile.

The accompanying diagrams, which are drawn to the same scale (1 inch = 5 miles), represent the tramway lines of Glasgow in their entirety, and the lines on the principal avenues in Brooklyn and Boston on which uniform five cent. fares are charged (it being impossible to represent on so small a scale all the network of lines in the business centres of the two American cities.) The relative sizes of the three systems are shown not only by these diagrams, but also by the following statement of track and line mileages in the three cities:

	Miles of Line.	Miles of Track.
Brooklyn	243	504
Glasgow	37	77
Boston (five cent lines) approx	168	325

Now the average fare paid by passengers on the Glasgow tramway system was, in its last financial year ending May 31, 1897,



Boston Street Rail ystem
(5 cent fare li
Population serv 000.

TOTAL PERMANENT INVE

Brooklyn
$93,782,048

Boston
$24,796,811

Glasgow
$3,158,430

1.85 cents. From this figure and in the light of the previous statement regarding fare schedules in Glasgow, it would appear that the average distance traveled per passenger is somewhat less than 1 mile, and examination of the map of Glasgow shows that the various tramway lines, measured from the central business district from which they radiate, are from 2 to 3 miles only in length. It is evident that the Glasgow citizen is a "short distance rider" by necessity.

Citizens of Brooklyn may leave the East River water front at the extreme western side of the city and travel eastward 7¾ miles to Flushing, or 10¾ miles to Jamaica; and southward 7¾ miles to Fort Hamilton and 10¾ miles to Coney Island; or they may take an 18 mile ride by trolley in various directions; all for the sum of five cents.

A citizen of Boston may leave Scollay Square near the business center of the city and travel southward 7½ miles to Neponset, or 5 miles to Forest Hills, Dorchester or Jamaica Plain; on the west 7 miles to Newton or Watertown; on the north 9 miles to Arlington Heights, 5 miles to Medford or Malden or 6 miles to the beaches of the North Shore; a single five cent fare paying for his transportation on any one of these routes.

There is no possible way of ascertaining the average ride of Brooklyn or Boston street railway passengers, but the immense areas covered by these cities and the location of their residence districts at considerable distance from the business centers—together with the fact that the congestion of cars in these business districts largely prevents short distance riding as a time saver—make it certain that *street railway transportation rates per mile traveled are, in both American cities, much lower than in Glasgow.*

A word about the service rendered in the three cities. In its last financial year the city of Glasgow so operated its cars as to require each to carry 12.2 passengers per car mile run. The West End Street Railway Company of Boston so ran its cars as to require each to carry but 6.5 passengers per car mile run—and this too in spite of the fact that the average Boston car has considerably greater carrying capacity than the average Glasgow car—while in Brooklyn the car service is so frequent as to give each car a carrying capacity of but 4.8 passengers per car mile.

The service given to the people of Brooklyn and Boston by the private corporations owning their street railway systems is vastly superior in frequency to that given to the people of Glasgow by the municipality.

Now as to comparative financial results. The following table will be of interest as showing the capitalization and operating figures of the Glasgow municipal tramways for the year ending May 31, 1897, of the eight Brooklyn surface and elevated railway systems for the year ending June 30, 1896; and of the West End Street Railway Company of Boston, for the year ending September 30, 1896.

	Brooklyn system.	Glasgow system (*a*)	Boston (West End) system.
Cost of plant and equipment.....	$93,782,048 (*e*)	$3,158,480	$24,796,811
" " per mile of track.	190,000	41,000	83,900
Gross receipts.....	10,513,561	1,854,410	8,341,958
" " per mile of track.	21,300	24,100	28,200
Operating expenses...	6,871,225 (*d*)	1,586,210 (*b*)	6,690,469 (*c*)
Net earnings.....	3,642,336	268,200	1,651,489
Percentage return on investment.....	3.9	14.5	6.7

(*a*) Assuming £1.=$5.00

(*b*) Including $142,550 depreciation and renewal fund, and $12,230 rentals.

(*c*) Including taxes, $598,285 and rentals $11,952.

(*d*) Including taxes, $344,898.

(*e*) Not including investment of Brooklyn Rapid Transit Company, or Kings County Traction Company.

Note these things:

1. Boston, one of the most carefully and wisely governed cities in the world and one which has from the earliest times adopted a liberal and far-sighted policy with regard to quasi-public corporations, has invited and brought about an investment of private capital in a single local transportation system of over $40 per capita served as against an investment of less than $4 per capita in Glasgow. There is believed to be no overcapitalization of any nature in the street railway system of Boston. In Brooklyn, which has also been wisely generous to its street railway corporations, the actual cash investment in its transportation system, apart from all overcapitalization, is probably not less than $60 per capita.

2. Private capital is serving both American cities far more

liberally and, in a sense, unselfishly than Glasgow has been served during the last ten years by private capital jealously restricted by the municipality, and by municipal capital itself.

3. The public has responded to the better service given in Brooklyn and Boston by patronizing their street railway systems to the extent of over $12 per capita, as against but $2.30 per capita in Glasgow. It should be noted, however, that the gross earnings of the two American systems are not nearly as large in proportion to the cash investment as is the case in Glasgow.

4. The private capital invested in the West End Street Railway system was forced last year to be content with net earnings equivalent to a return of but 6.7 per cent., while the return paid upon the aggregate book investment of the Brooklyn properties was but 3.9 per cent.

5. During its last financial year the West End Street Railway Company of Boston paid into the public treasury in the form of taxes a sum greater by 28 per cent. than the entire operating profits of the Glasgow municipal system during its last financial year; and the street railway properties of Brooklyn paid as taxes over twice as much as the Glasgow operating profits.

Those who cite European experience in street railway transportation matters, do not seem to at all realize the tremendous economic importance of population density, frequency of service, and maximum and average lengths of ride as affecting investment and returns upon investment. All the great European cities are essentially different from American cities of corresponding size, in that their people are hived together in tenement house districts as close as possible to the business centers, and there has been no such centrifugal force from centers to suburbs, as is found in the wonderful municipal transportation facilities of America. Europeans in general do not know what street railroading is, according to our standards, and to attempt to apply Old World theories and restrictions to American practice in this field would be like adopting for New York city the municipal polity of Oshkosh—would be a passage backwards into a far earlier stage of social development.

* * * * *

The purely economic argument against municipal ownership and operation of street railways, data concerning which has been given in the preceding pages, may be summed up as follows:

Excessive returns on the necessary accumulated cash investment can never be earned in America by either municipal or private capital engaged in the operation of street railways.

In nearly every city in America, moderate returns on capital invested in street railways are possible only by the exercise of great skill and economy in management.

The history of the conduct of municipal enterprises does not lead to the belief that this exceptional skill and economy can be obtained under municipal management.

* * * * *

I have said that I do not admit that the purely economic argument should be the controlling one in the question of private, versus municipal ownership and operation of street railways.

Who believes that had our municipalities been in control of transportation facilities from the earliest days of street railroading, we should see to-day this immense expansion and development of American cities which has made our social problems so easy to solve, as compared with those of the Old World cities? Who can estimate in dollars and cents the value to Americans and to the world in general of such a magnificent sociological experiment? Are we now to grope around with eyes intent on earth seeking the paltry sixpence which we fear has been lost, when all the grand world of light, and beauty and freedom—created by a policy whose essential wisdom we can hardly realize, it is so simple—is around us?

These results have not come about by accident. There are underlying principles and laws of governmental and human nature, which have been and are, as inevitable in their action as any in the domain of scientific sociology.

Governments in general, and municipalities in particular, are essentially conservative in trying new things. Private capital, on the contrary, is essentially eager to anticipate the future and preempt all possibilities of profit. Herein lies the real and fundamental reason why municipal ownership and operation of public service enterprises is not, nor ever will be a

success from the broader points of view—from the standpoint of a people's progress.

With 100,000 fellow citizens intently watching and ready to call him to account for the slightest extravagance or appearance of extravagance, the municipal official dare not be broadminded nor progressive. He moves deeply, in channels of routine and mazes of precedent. Red tape binds him to earth and produces in him narrowness of vision and suspicion of new things.

Private capital sees in public service enterprises immense opportunities for *speculative* profits. Earning power may be large or small or may fluctuate within wide limits from year to year without destroying this chance for speculative profits. Street railway extensions may be built without possibility of adequate returns for years to come—sometimes to shut out competition, sometimes to obtain construction profits, sometimes in a really wise determination to build for the future. New and beautiful cars may be bought, and parks and amusement resorts established to attract the public. Those controlling street railway properties realize more deeply than the public often gives them credit for, how essential to their financial prosperity it is to please that public and avoid antagonism. All these influences are genuine public values, obtained solely from private management, and what thoughtful person will not admit that they enormously outweigh a slight reduction in taxation, even if such reduction could be obtained through municipal ownership?

* * * * *

A word about the socialistic tendencies found in this idea of municipal ownership and operation of public service industries. Its advocates hardly seek to deny these tendencies, but usually resort to generalities or sophisms, as, for example, "Such charges will have little weight with thoughtful persons," or "If municipal ownership be socialistic as to which, while not conceding the charge, we may well care nothing, providing it be also desirable and profitable, then New York is already committed to socialism, for the new charter declares," etc.

I do not believe in socialism nor am I willing to treat these socialistic tendencies lightly as of little account. I do not believe in operation by national or state governments or by municipalities of any public service industries which can possibly be placed

in private hands. I readily concede that many arguments, some strong and some merely plausible, may be brought forward in support both of pure socialism and of that more limited branch of it where the government controls every enterprise which uses the facilities which it has created. I shall not attempt to recapitulate the many arguments against the socialistic idea, but shall content myself with saying that the development of individual and self-poised character is, to my mind, a higher end of social organization than the performance of every social function in the cheapest possible manner. I would willingly pay a price, were it necessary to do so (which I believe, however, to be not the case), for the privilege of living a life free from the iron hand of the governmental bureaucracy which would be created by the application of these socialistic and semi-socialistic principles, and of the tremendously powerful political organization which will surely go hand in hand with this bureaucracy. Go to Germany—a country curiously combining absolutism with advanced socialism —and learn how this "iron hand" is felt by the humblest even more than by the most powerful; ascertain how impossible it is for the individual outside the machine to place responsibility or to obtain redress for wrongs and incivilities; feel how inflexible is the paternalism which confines that country's children into narrow courses of conduct; and take note of the breath of relief heaved by our German-American friends as they step again upon our shores after a brief—an always brief—return to their native country.

Tell the restless, energetic American that he must confine his attention to agriculture or trade—that he shall not enter the vast field of effort found in the service of the public, except as the minute cog-wheel of an enormously complicated and truly monopolistic, though governmental, machine—and you speak to him not of progress, not of development, not even of justice as between man and man, but of contracting minds and inevitable degeneration.

* * * * *

I reject municipal ownership and operation as the best solution of the street railway problem, not only for the reasons already stated, but also because there are better, more truly scientific and more broadly profitable ways of gaining for the people the maxi-

mum money return *justly* to be derived from street railway operation. The present system (?) of dealing with street railway corporations by limited term franchises and by the imposition of constantly heavier burdens of taxation is far from being among these better ways, and is in the highest degree, chaotic, unprofitable to the city and unsatisfactory to private capital. Adequate compensation for franchises cannot possibly be obtained by the city nor be offered by private capital under such a system, for everything is so tentative and uncertain that ordinary business prudence requires the utmost caution in undertaking obligations by trustees for invested capital. Burdens of taxation imposed upon street railway companies are, in reality, a form of indirect tax upon the people, since they act to prevent reductions of charges for services rendered. Capital cannot be secured on advantageous terms where franchises are short, and this, too, keeps charges above a minimum, not only because a higher price has to be paid capital in the form of interest, but also because a larger sum has to be set aside each year out of earnings to provide for contingent losses on investment at the end of the franchise period. The much talked of provision for twenty-five year public service franchises in the new charter adopted for New York City is economically wrong in principle for this reason.

The best solution of the problem, and one which is capable of the widest application, is found, I believe, in *complete monopoly, private ownership and operation, perpetual franchises and a system of perpetual profit sharing with the municipality, joined to a remission of charges to the public if, and whenever profits come to be sufficient for that purpose.*

By a policy of this kind it is possible:

1. To avoid pledging the city's credit for making the necessary original investment.

2. To place upon private capital the burden of all losses realized or contingent.

3. To obtain for the city an equitable share of all profits realized.

4. To avoid the creation by the city of a complex bureaucratic organization with its attendant political dangers.

5. To secure for the benefit of the municipality, its people and the private capital invested the undeniable benefits of private management as affecting profits, adequate increase of mileage, perfection of service and direct responsibility.

6. To secure for the municipality, the people and the private capital invested the true pro rata shares of each in the additional profits coming with municipal development in the future.

7. To borrow capital at interest rates hardly greater than those quoted to the municipality itself.

This plan possesses, moreover, a great advantage in that it can be put immediately into practice on many of our existing systems as well as on new ones. A street railway company is operating in a city under a franchise which has thirty years yet to run. Let the city and company officials meet together, and, in the full light of public scrutiny, prepare a profit-sharing plan of this nature. Both have something to give and something to receive. The city offers a perpetual and exclusive franchise, in exchange for the present one, freedom from taxation, and the right to a moderate return upon the investment before declaring "profits." The company offers to the city the right of inspection and audit of its books (with an agreement about the system by which they are to be kept), and a predetermined share of all profits now and in future realized over and above the agreed return upon the investment. Both agree with the public that when these profits reach a certain percentage of the gross receipts there shall be a reduction in fares.

When all the safeguards possible to devise shall be thrown around a municipal contract of this character, it will be found that the street railway problem in that particular city is solved for all time, and in a fair and equitable manner. Thenceforward the municipal government and the street railway corporations will work *together* to build up and develop on its broadest lines the municipality of whose interests they are, at once, guardians and servants.

BUSINESS MEN IN CIVIC SERVICE: THE MERCHANTS' MUNICIPAL COMMITTEE OF BOSTON.

By Robert C. Brooks.

In the many chapters of the municipal Book of Lamentations, no two subjects recur more frequently than the degeneracy of councils and boards of aldermen on the one hand, and the lack of interest among business men and the so-called better classes on the other. Separately or conjointly, these two causes have been held responsible for all the ills that city government in the United States is heir to. Elaborate schemes of ballot reform, minority and proportional representation, re-districting, changes from the bi-cameral to the single-chambered council, have been proposed, and in some cases adopted, with a view to raising the standard of municipal legislatures and enlisting the interest of the great body of citizens. All these plans necessitate the tedious delay of discussion and agitation, and yet often yield imperfect results when legislation is finally secured. The education of the people to their use also stands in the way of the direct application of many reform measures which are apt, especially at their inception, to be somewhat complex and incoherent. At the same time, it is apparent to all interested observers of municipal affairs that, during the last few years, there has been a growth of civic interest and pride that places at the immediate disposal of progressive mayors a vast body of earnest lay assistance hitherto unavailable. In the Merchants' Municipal Committee of Boston has been found a simple, informal means of utilizing this latent civic energy to the great improvement of city government, without incurring the delays and miscarriages incident to legislative action, or interfering in any way with the basis of representation.

The Merchants' Committee is an application with many modifications of a principle which is extensively applied in German

and French administration.* So far as is known, however, the Committee has no exact counterpart in the annals of American municipalities. Locally it is often referred to as the "mayor's cabinet," with the result that it is sometimes confused with the Brooklyn cabinet as organized by Mayor Seth Low in 1882. In reality, the two have little or nothing in common. The members of the Boston Committee are unofficial advisers of the mayor, and none of them is connected with any administrative department of the city government. The members of Mr. Low's cabinet were heads of departments appointed by himself, and their deliberations were confined to general departmental affairs—topics which are excluded from the consideration of the Merchants' Municipal Committee. The initiative in the formation of the Committee came entirely from Mayor Quincy, the first official notice of the project occurring in his letter accepting the Democratic nomination to the mayoralty in 1895. Mayor Quincy had noted the strongly centralized organizations of the Boston business men, which have long enjoyed the distinction of being among the best types of such bodies in the United States. During the last ten years, they have taken a keen interest and have done very effective work in national and state affairs as well as in ordinary commercial enterprises. Why could not these organizations be interested in the government of their own city? The most pressing problems before the City of Boston relate to its further development as an industrial centre, questions of foreign commerce, domestic trade and local manufactures; yet, strange as it may seem to one unacquainted with the peculiar conditions of city government in the United States, it is nevertheless true that, until the establishment of the Merchants' Municipal Committee, the mercantile associations of the city of Boston had not concerned themselves with affairs in which they were so vitally interested. In the words of a prominent real estate dealer, they simply thought it was "no use."

* A somewhat similar principle has been applied in the advisory railroad boards and advisory boards of charities and corrections of a number of states. In German cities service on such boards is obligatory. (See Frank J. Goodnow's "Comparative Administrative Law," Vol. I, p. 334, 337; Albert Shaw's "Municipal Government in Continental Europe," p. 312, Chapter V; Woodrow Wilson's "The State, pp. 295–6. The French Council of the Prefecture has advisory powers similar in some respects to those of the Merchants' Committee. See Frank J. Goodnow's "Comparative Administrative Law," Vol. I, p. 274.)

Immediately after his inauguration in 1896, Mayor Quincy took up the plan outlined in his letter of acceptance. Communications were sent to the Associated Board of Trade, the Boston Clearing House Association, the Boston Chamber of Commerce, the Boston Merchants' Association, the New England Shoe and Leather Association and the Real Estate Exchange, inviting them to appoint delegates for a term of two years to a committee of seven, to be known as the Merchants' Municipal Committee. The Boston Associated Board of Trade,* which is itself a delegate body composed of 72 members representing 24 organizations, was invited to select two representatives, each of the other organizations sending one. Seven was fixed upon in preference to a larger number of delegates as better calculated to produce a body sufficiently representative, and, at the same time, not so cumbrous as to require formality or red tape in the transaction of business. The six organizations mentioned above, which, taken in the aggregate, represent fairly the business interests of the city, were chosen by Mayor Quincy from among the mercantile associations of Boston after consultation with leading business men. The method of election of delegates was left wholly to the organizations themselves. In some cases they were appointed by the executive committee of their organization, in others a special meeting of the members was called and a ballot taken. Obviously it is highly essential to the success of such a committee that its members should be freely chosen by the bodies represented, and not appointed by the mayor. In the latter case, the taint of partisanship would be certain to attach itself to their work and to destroy any influence for good that they might otherwise possess.

The Mayor's invitation met with a hearty response from the business men of the city. In the selection of delegates party

* The Real Estate Exchange has a membership of 150 individuals, the New England Shoe and Leather Association a membership of 175 firms, the Boston Merchants' Association a membership of 230 firms, and the Boston Chamber of Commerce a membership of 982 individuals. Each of these organizations, in addition to its one representative in the Merchants' Municipal Committee, is also represented indirectly on the Committee by virtue of membership in the Boston Associated Board of Trade. The other nineteen organizations belonging to the Boston Associated Board of Trade have a membership of 1,880 firms and individuals. The total membership of the Boston Associated Board of Trade, including the five organizations mentioned above, is 3,417 firms and individuals. The Clearing House Association, which is not represented in the Board of Trade, has a membership of 52 banks. It is estimated that a total of over 6,000 business men are represented by the Committee.

lines were ignored, each organization choosing its representative solely with reference to his experience, standing and known ability.* The members elected for the first two years are active, influential business men engaged in the management of large enterprises and deeply interested in public affairs, but not politicians in the commonly accepted sense of the term. All are firm believers in the desirability of a separation of municipal affairs from national and state politics. Their ability is sufficiently attested by the fact that they hold or have held many high positions within the gift of their business associates in the organizations which they represent. Nor need there be any fear that the quality of men selected for such service by the mercantile associations will deteriorate. They understand that weak men on such a committee would not only have no weight, but

* The following table exhibits names of the present members of the Committee, organizations represented, politics, business, and positions formerly held in trade organizations:

Names.	Representing.	Politics.	Occupation.	Positions held in trade organizations of the City.
Jonathan A. Lane, (Chairman).	Boston Associated Board of Trade.	Rep.	Woolen Commission Merchant.	Pres. Boston Merchants' Assoc. for 8 years.
John C. Cobb, (Vice-Chairman).	Real Estate Exchange.	Rep.	Real Estate Dealer.	Director Real Est. Exchange and of Merchants' Assoc. Delegate to Mass. State Board of Trade.
Jerome Jones,	Boston Associated Board of Trade.	Dem.	Crockery.	Ex-Pres. Boston Associated Board of Trade.
A. Shuman,	Boston Chamber of Commerce.	Dem.	Clothing.	First Vice-Pres. and Charter Member Boston Merchants' Assoc.
James P. Stearns,	Boston Clearing House Association.	Rep.	President Shawmut National Bank.	Member Executive Committee Clearing House Assoc.
Robert M. Burnett,	Boston Merchants' Association.	Dem.	Manufacturing Chemist.	Director Boston Merchants' Association.
Andrew G. Webster,	New England Shoe and Leather Association.	Rep.	Leather Manufacturer.	Vice-Pres. New England Shoe and Leather Assoc., Ex-Vice-Pres. and Director Associated Board of Trade.

would discredit the organizations sending them. Only by electing their strongest men and backing them up consistently can they fully improve the opportunity opened to them. It may be interesting to note in passing that a majority, four of the seven members of the Merchants' Municipal Committee, are Republicans, but this fact has had no influence whatever upon the work of the body. Predictions were rife before the organization of the Committee that it would not only get into politics, but would introduce dissension and political intrigue into the business associations themselves. Some slight opposition developed on this score, enough to impress upon the delegates the supreme importance of avoiding the slightest appearance of the evil of partisanship. Experience has falsified these predictions, no imputations of this sort ever having been made against the Committee. A striking instance of the determination of the body not to interfere in any way with partisan politics is seen in the fact that at its first meeting a resolution was unanimously adopted declaring that no candidate or applicant for office should receive the recommendation of any member of the Committee.

Meetings of the Committee have been held regularly every two weeks since its organization and occasionally at other times, on the call of the chairman. The small size of the body enables it to transact business without formality, and in its methods of procedure it resembles a board of directors rather than a legislative body acting under parliamentary rules. The Committee chose a permanent chairman and vice-chairman at its first meeting; the Mayor, although in attendance whenever his duties permit, does not preside at its meetings—another point wherein it differs from the Brooklyn cabinet. The functions of the Committee are purely advisory; it has no power of initiative, and can pass no vote of binding effect. The Mayor communicates to the Committee either formally or informally, such matters as he may desire it to act upon. In the case of formal communications from the Mayor, sub-committees of three are appointed to make inquiry and report to the whole body. The meetings of the Committee are held in private, so that the utmost freedom of discussion may prevail. There is no attempt at oratorical pyrotechnics; matters are taken up in a judicial manner, the aim always being

to secure a consensus of opinion before any report is made. Action is never hasty, and it rarely happens that decision is given in a case at the same meeting a communication is received. In dealing with the questions submitted to them, the members of the Committee, while acting under the general authority of their organizations, seek not so much to express their individual opinions as to ascertain and express the opinions of the bodies they represent. While no questions are referred back to the constituent bodies for formal action, the members of the Committee make it a point to consult frequently the Executive Committees and the leading members of their organizations informally, in order to obtain their views on questions under discussion. At the end of each meeting the stenographer, who acts as clerk of the Committee, prepares for the press an official statement of business transacted. The newspapers of Boston have treated the Committee uniformly with consideration, recognizing the importance and moral force of the matured opinions of a body representing six thousand business men of the city.

From the time of the organization of the Merchants' Municipal Committee, four broad, general subjects have been recognized by Mayor Quincy as falling directly within its province—finance, commerce, taxation and transportation. It would be natural to suppose that a certain similarity of function might result in conflict and jealousy between the Committee and the City Council, yet it is evident that two bodies, one of which has full legislative, and the other only advisory powers, are less apt to come into conflict than two bodies, each of which enjoys full legislative power with the possibility of rejecting the decisions of the other. In practice, it has not proved a difficult matter to draw the line at the proper place between the activities of the two bodies. The questions referred to the Merchants' Municipal Committee, broadly speaking, affect the city as a whole. If the residents of any ward or district desire street or other local improvements, they must apply to their representatives in the Council; the Merchants' Committee takes no cognizance of such purely local questions. The desirability of a small sewer in Dorchester would not be discussed in the Committee; the building of a system of trunk-line sewers in the heart of the city might be referred to it. In addition to this general distinction,

much doubtless depends upon the tact of the members of the Committee in their relations with the city legislature, and the discretion of the Mayor in presenting matters for the Committee's consideration. The practical results in Boston for the short period during which the Merchants' Committee has been in existence, abundantly indicate the possibility of permanently friendly and mutually helpful relations with the legislative branch of the city government.

The utility of the Committee may best be judged by a brief review of the work accomplished during its short service of eighteen months. Perhaps the most valuable of all its activities has been the advocacy of the reorganization of the City Council, as a result of which Boston will, in all probability, soon discard its present double-chambered for a single-chambered council, at the same time that Greater New York, turning its back on general experience, creates a double-chambered municipal legislature. The present Boston Council is made up of two branches, a board of twelve aldermen elected at large and a common council of seventy-five members elected three from each ward. The term of office for both aldermen and councilmen is one year. For some years the twelve aldermen have been elected under a very imperfect form of minority representation, whereby no voter is allowed to vote for more than seven aldermanic candidates. As a result each party nominates only seven candidates, and all that the voters can do is to reject two out of the fourteen names thus placed before them. To correct this it has been proposed that each party should be compelled by law to nominate twelve candidates. Proportional Representation also has a strong backing in Boston, and the Municipal League presented a bill providing for its establishment before the last legislature, but did not succeed in getting it through the Committee on Metropolitan Affairs. Public opinion seems hardly ripe for this reform, and for the time being it has been given up in order that what is generally recognized as the first step towards a better system may be taken along the lines indicated by the Merchants' Municipal Committee and embodied in the act reorganizing the City Council, which has already passed the legislature, and which is to be submitted to the voters of Boston at the state election in November next. Briefly stated, this act provides for a single-chambered council of thirty-seven mem-

bers, twenty-five to be elected annually, one from each ward, and twelve at large for two-year terms, six to be elected each year.* If the bill is accepted, and it seems probable that it will receive a good majority of votes at the coming referendum, the members of the new council will be elected at the city election to be held on the 21st day of December of this year. The many points of advantage of the new system are readily seen. The change from the double to the single-chamber is its most patent merit. Twelve candidates at large each year for the board of aldermen, as under the present system, is too great a number to present for consideration at one time ; the office is made less conspicuous, while the method of apportionment actually practised by both parties leaves the voters at the mercy of the machines. The new two-year term of the twelve members elected at large will give a certain degree of continuity to the proposed council which is not enjoyed at present with terms of one year only for members of both chambers. Under ordinary circumstances the minority party is certain to receive at least a considerable, if not an exactly proportionate, share of representation in the new body. Assuming a Democratic majority in the city at large and in fourteen out of its twenty-five wards, twenty of the members elected to the new council in one year would be Democrats, and eleven Republicans, the other six members holding over on two year terms. It is altogether probable that the future will see some changes and improvements in the new council; proportional representation in some form may be introduced, but the Merchants' Municipal Committee certainly deserves great credit for indicating the initial step forward.

The subject of taxation has been before the Committee since its organization, and the work accomplished along this line alone would amply justify its existence. On the basis of a thorough investigation, such as the representatives of business interests directly affected could make with better results perhaps than any other body of men in the city, a report was prepared and a bill submitted to the legislature providing for extensive reforms in the system of taxation. The work of the Committee did not stop with the mere prelim-

*At the first election twelve aldermen will be elected at large, six for one-year and six for two-year terms.

inaries of advice and suggestion. Measures were taken to secure the widest possible discussion of the bill throughout the city and state. The press of Boston, which is almost unanimously in favor of the proposed measure, was enlisted in the work. At a dinner given on Feb. 29th, 1896, to the mayors and presidents of the boards of trade of thirty of the larger cities of Massachusetts, several members of the Merchants' Municipal Committee explained the bill and commended it to the attention of these representatives from all parts of the State. An examination of its provisions shows them to be fairly in accord with progressive ideas of tax reform. Taxes for local revenue are to be confined to real estate. The State is to collect the whole of its revenue from independent sources—from the corporation and franchise taxes and from succession taxes on personal property as it passes through the probate courts—the only time it can be reached with certainty. After paying State expenses out of succession and franchise taxes, the balance is to be remitted first to the counties and from these, if there is anything remaining, to the municipalities. The fairly high tax on personalty passing at the death of the owner, which was provided for as an offset to the exemption of such property during the life of the owner, serves also as a concession to the personal property taxationists. The simplicity of the proposed new system of taxation is not the least of its many advantages. Far from having to meet the narrow opposition of the real estate interests of the city of Boston, we find their delegate to the Merchants' Committee stating the position of the Exchange as follows at the banquet mentioned above :

> " As the representative of the Real Estate Exchange on the Merchants' Municipal Committee, I sought the views of the large real estate owners in Boston upon this subject, and of the Real Estate Exchange in general, and it will probably strike you with surprise when I tell you that, as a result of the opinions which I heard expressed by them, the representatives of the merchants and manufacturers upon the Committee were a great deal more timid about the burden which would be placed on real estate than I was. And the system which we have agreed upon does not go to the extent which I, personally, and I think I may say, a majority of the real-estate owners, are willing that it should go."

The bill presented to the legislature by the Merchants' Committee was referred to a commission which is now considering the entire subject. It is hardly probable that such a well-directed agitation can be altogether barren of results.

Several large questions of transportation, whose importance to the future development of Boston is almost as great as reform in taxation or local representation, have been presented to the Committee. The influence of these representatives of the business interests of the city with the railroad companies, and their practical familiarity with existing conditions enabled them, in each case, to make important contributions to the correct solution of the problems. The new union station for railways entering the city from the south, and the re-location of the tracks of the Old Colony Railway, each involving a large scheme of permanent improvement, were two of the more important transportation questions submitted to the Committee. A valuable report was also made on the proposition of a strong syndicate to build an elevated railway system in the city.

In addition to the more important questions requiring extensive investigation and reports from sub-committees and necessarily remaining open for consideration for long periods of time, many minor questions are submitted to the Committee by the Mayor verbally. The benefit of the knowledge and advice of men of business instincts and special ability is thus continually available in the executive work of the city. As an instance of the helpfulness of the Committee in smaller matters may be mentioned an investigation which is now being made into the methods of the city's bookkeeping, with a view to its improvement and the possible establishment of a department of accounts.

The utility of the Committee is by no means confined to the discussion of large municipal questions and careful expression of opinion on them. The judicial and non-partisan spirit which it has manifested from the beginning has given the public a confidence in its conclusions that the utterances of no political body, however sincere, could command. As a consequence, the co-operation of different elements, which under other circumstances might snatch up the issue as a partisan club, is secured, and the position of the city government is greatly strengthened before the legislature. The importance of this condition is apparent when it is understood that the Mayor of Boston is obliged to spend a large part of his time for five months out of every twelve representing the city's interest before legislative committees. Boston enjoys a decided advantage over other large American cities in being

the capital of the State in which it is located. Public opinion in the city can be brought to bear on the legislature much more effectively than is the case in New York, Chicago or Philadelphia. The population of the State is largely urban—another element favorable to the considerate treatment of municipalities by the legislature. The Legislative Commitee on Metropolitan Affairs is also composed largely of representatives from Boston and its suburbs. With these favoring conditions, the cry of "hayseed domination" is rarely heard; but on the other hand, complaints of political manipulation of the city's affairs have been frequent. As the city of Boston is usually Democratic, while the state of Massachusetts is Republican, it is not surprising to find in the history of their relations many instances of friction arising from political distrust. But when, as at present, the Mayor is able to present policies before a legislature of a strongly adverse political complexion, backed by a body so influential as the Merchants' Municipal Committee, which happens to agree politically with the legislative majority, while it differs with the Mayor himself, it is easy to see that the suspicion of partisanship is removed in a great measure and the probability of favorable consideration greatly improved. In this point lies one of the decided advantages of such a body.

Of the permanence of the Merchants' Municipal Committee there can be little doubt. The successful results already accomplished render highly probable its retention by Boston and its imitation by other cities. Even if, through the action of an unfavorable executive, the Committee should be abolished, its existence has succeeded in arousing an interest in good city government among the business men that must henceforth be reckoned with as an enduring force in local politics. Assuming its continued existence, certain modifications in the structure of the Committee would seem desirable, especially if the body is to be given official standing by act of the legislature. While the Committee was never designed to be equally representative of all business interests according to their relative importance in a strictly mathematical sense of the term, as close an approximation to this ideal as conditions will permit would be advantageous. The six large and influential bodies now represented in the Committee enroll among their membership the leading men of the more important

business interests of Boston. There are other trade organizations, however, of hardly less importance, which, if represented on the Committee at all, are represented indirectly, and only by virtue of their membership in the Boston Associated Board of Trade. When the plans for the organization of the Committee were first made public, this fact caused some slight jealousy among the associations not directly represented; although it is but fair to state that the work of the Committee has been so thoroughly representative of the business men of the city that it has to-day their strong support generally. While no change is contemplated in the present Board until the two-year term for which its members were elected has expired, a plan has been proposed that would entirely remove any objection yet remaining on this score. The Associated Board of Trade, as has already been stated, is a delegate body, and the twenty-four trade associations represented in it include all the business organizations of importance except the Boston Clearing House Association. It is proposed that each of these twenty-four organizations should present one name, and that out of this list, six members of the Merchants' Municipal Committee should be chosen by the Associated Board of Trade, leaving the Clearing House Association to choose its representative as at present. By this method, a more representative body would be secured, and all jealousy caused by the suspicion of favoritism removed.

It may be seriously questioned whether it is desirable to give the Merchants' Municipal Committee legal standing as a new and distinct department of the city government. That the absence of such recognition has not prevented the accomplishment of results of unquestioned value we have already seen. In the opinion of Mayor Quincy, however, such recognition is desirable. Accordingly, a section drawn by him was introduced into the bill revising the city charter, which was presented to the legislature early in 1897, after receiving the approval of the Committee on Metropolitan Affairs.* The proposed bill changed the

* SECTION INSERTED BY MAYOR QUINCY IN THE BILL TO REORGANIZE THE CITY GOVERNMENT OF THE CITY OF BOSTON, INTRODUCED IN THE LEGISLATURE OF 1897. "There shall be established as an adjunct to the government of said city a municipal board of commerce and finance, consisting of seven members, who shall be chosen as follows: In the month of December of every year in which a mayor is to be elected, the Boston Associated Board of Trade shall choose two members, and the Boston Chamber of Commerce, the Merchants' Association, the Real Estate Exchange,

name of the Committee to the "Municipal Board of Commerce and Finance," but left the constituent bodies, the number and method of electing members as before. The powers of the new board were extended in a few highly important particulars. It was to be given the power of initiative which the present Committee does not possess, and was to be made an advisory board for the city council as well as the Mayor. It was to consider any business referred to it by either the Mayor or the Council. No change was made in the essential nature of the Committee's functions, and any action taken by the new board was to remain purely advisory, with no binding force upon any of the parties to whom it might be addressed. Before the legislature the entire section of the bill relating to the Committee was stricken out, and it therefore stands, as before, on a purely voluntary basis. No great fight was made over the point, as the continuance of the Committee was assured in any event. The opposition was largely, though not entirely, on political grounds, and there was an evident tendency to ridicule the measure rather than to discuss it on its merits. It is intended to bring up the question of the official recognition of the Committee at the next session of the legislature, when the prospects for favorable action will be greatly improved. Without in any way questioning the value of the results accomplished by the Committee, granting even that its success more than warranted its continuance, it may still be doubted whether the experience of a year has been sufficient to define the form in which it should be permanently cast. Conferring the power of initiative and opening the Committee to the Council are long strides to take without carefully estimating contingencies.

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the Clearing House Association, and the Shoe and Leather Exchange shall choose one member, to serve for the term of two years from the first Monday of January next ensuing. The persons receiving certificates of election as such members, signed by the several presidents and secretaries of said organizations, shall respectively be deemed to be chosen as aforesaid. Said board shall organize annually on the first Monday of January by the choice of a chairman and secretary, shall keep a record of all its proceedings, and shall be provided by the mayor with a suitable room in the city hall for the holding of its meetings, and with necessary clerical assistance. The functions of said board shall be purely advisory. It shall, in its discretion, report in writing upon any matter or questions pertaining to the development of commerce, trade, transportation or industry, or to public finance or taxation, which may be referred to it for investigation or consideration either by the mayor or by the city council, and it may, upon its own initiative and without such reference take up the investigation or consideration of any such matter or question, and address a communication embodying its conclusions to the mayor, the city council, or the general court, or may appear before any committee of the city council or of the general court or before any other public authority."

The avoidance of conflicts with the Council, upon which the success of the Committee so largely depends, might become more difficult with the power of initiative left in the hands of the Committee. At present the Mayor, a single and entirely responsible officer in full view of the public, alone has the power to bring matters before the Committee, a body which is not responsible or answerable in any way to the public. It is true that by the provisions of the bill the Committee was not to be compelled to give an opinion on any subject if it preferred not to do so, but this was an imperfect safeguard, a safeguard left to be exercised by an irresponsible body. Cases might arise where refusal to report would produce as much friction as an unfavorable report. For these reasons the rejection of the bill by the legislature may prove fortunate in the end. The present usefulness of the Committee is not impaired thereby in any way, while the question of its ultimate form and status is left open for further consideration in the light of greater experience.

Certain of the objections made to the Merchants' Municipal Committee before the legislature are worthy of careful consideration. For instance, it was urged that what was needed was not an advisory board like the Committee, but a reorganization of the City Council which would give business interests proper representation in municipal affairs. No doubt, under ideal conditions, business interests would be properly represented in our city councils—how to bring about such conditions is not so apparent. It cannot be claimed that the business men of Boston are even proportionately represented in the present city council. The majority of them live outside the city limits, and consequently have no vote in the municipality where by far the larger part of their taxes are paid. In the cities of Great Britain non-residents of this class are given the right to vote in city elections.* The Merchants' Municipal Committee might even be defended by admirers of the English system on the ground that it gives a voice in municipal affairs to a large element, at present disfranchised,

* See Municipal Government in Great Britain," by Albert Shaw, p. 80, Chap. II. The distance limit within which persons occupying business property in British cities must live to be entitled to vote is seven miles. It is estimated that a population equal to that of Boston itself may be found outside its limits, within ten miles of the center of the city. Of course, a large portion of this population is employed within the city limits.

whose stake in the good government of the city is certainly not the smallest.

Another objection to the Committee was made on the ground that it was utterly undemocratic to have men selected from a certain class help administer a government founded on election by the people. This view appears to be based on a misconception of the true function of the Committee. If it were to be given powers co-ordinate with the Council, or if its advice were made obligatory upon the Mayor, the criticism would indeed be justified. But it is simply advisory in its nature, neither administrative nor legislative. As long as its powers are thus restricted, it is hard to understand why such a body, composed of men of large experience in business affairs,—business experts—is less democratic than any other body of experts which might be called in to advise the city government in special matters falling within their province. There is one sense, however, in which this criticism is valid. It would unquestionably be a great abuse for a mayor to endeavor to divide responsibility with a body constituted like the Merchants' Municipal Committee, or to excuse official acts on the ground that he was acting upon their advice. A careful distinction between the functions of the Committee and the Council, such as has been previously mentioned, and the determination on the part of the Committee to make no recommendations for appointments in the municipal service, reduce the possibility of such a condition of affairs to a minimum, while, with a strong mayor, such an abuse is utterly impossible. It is hardly necessary to add that nothing of the sort has occurred in connection with the Merchants' Municipal Committee.

While the bill providing for the official recognition of the Committee was pending before the legislature, an attempt was made to show that it was opposed by the laboring men of Boston. As a matter of fact, the various labor organizations of the city used no influence whatever against the bill. So far as the work of the Committee itself is concerned, it has met with the unqualified approval of the labor elements of the city. Especially is this true of the attitude of the Committee on such questions as public bath houses and the municipal printing plant, in which the working men of the city were particularly interested. Nor is there any complaint among the laboring men of Boston that their

opinions and demands do not receive proper attention from the present city administration. Not only does the fact that the great majority of workingmen live and vote in the city, secure to them full representation in the Council, but communications from the Central Labor Union and committees from single organizations have always received the most careful attention. At the same time, there has been some slight opposition to the Committee on the ground that, until labor men were included in its membership, it could not be thoroughly representative. In opposition to this view, it must be remembered that the Merchants' Municipal Committee was never intended to be a third chamber representing all classes in the community. It would be absurd to assert that the interest of the laboring men of Boston in the questions submitted to the Committee, is not fundamental, but if what is wanted is a business view of these questions they must necessarily be referred to a body composed of business men. Similarly, if a labor view is desired — and such a view would often be of equal, if not of greater value, than that of the business classes—a body composed of laboring men should be consulted. The opinion of a composite body, or rather the opinion of the majority of a composite body, could not claim to mirror faithfully the opinions of all elements represented. The practical difficulty of securing harmonious action with elements of such diverse points of view in the same body, also stands in the way of labor representation on the Committee. Assuming that a satisfactory basis of representation could be obtained—and this is a point that would have to be settled before any action could be attempted—there would probably be no way of settling differences of opinion except by balloting. One of the chief merits of the present Committee is that discussion is relied upon to bring about a consensus of opinion rather than the mere counting of heads. For these reasons, separate organization for the laboring element, if representation of this sort were demanded, would probably prove more satisfactory than a single mixed association. This point, however, must remain a matter of speculation until the experiment is actually tried. The councils of English cities in which labor representatives, working harmoniously with professional and business men, have achieved such notable results, can hardly be quoted to prove the contrary, as they are not pre-

cisely similar to purely advisory bodies, which, to accomplish the best results, must use other means than the ballot in deciding differences of opinion. On the other hand, the intelligent interest which the laboring men of American cities are beginning to take in civic affairs generally, and in the question of the ownership and operation of municipal monopolies particularly, certainly qualifies them to express opinions which should have great weight and value with city administrators. It is evident to all careful observers of the trend of municipal politics that within the next few years there will be some extensive experimentation on the part of American cities in the way of operating lighting and street railway plants. An attempt to bring laboring men and business men together to discuss informally broad policies of this sort in an advisory body similar in its main outlines to the Merchants' Municipal Committee, would at least be watched with great interest.

To estimate rightly the value and influence of the Merchants' Municipal Committee, it must be considered not separately, but in its proper relation to other parts of a general movement to enlist the services of public-spirited citizens in the government of the city. In addition to the Merchants' Municipal Committee, Mayor Quincy, during his term of office, has had the benefit of the advice and assistance of three other bodies composed of unofficial citizens—an Advisory Committee on Public Institutions, an Advisory Committee on Public Baths, and the Board of Municipal Statistics. Although constituted differently, and working in more restricted fields, these bodies are hardly inferior in interest and utility to the Merchants' Municipal Committee itself. They furnish abundant evidence of the willingness of our best citizens to serve without remuneration the city in which they live. In German cities, where the gratuitous services of thousands of citizens are enlisted in the oversight of schools, the distribution of charitable relief, and other municipal undertakings, the same principle is successfully and thoroughly applied in a somewhat different way. With such possibilities before us, the success which has attended the workings of the four unofficial committes in Boston, justifies the belief that the further development of the idea upon which they are based, may play no unimportant part in the solution of the problem of city government in

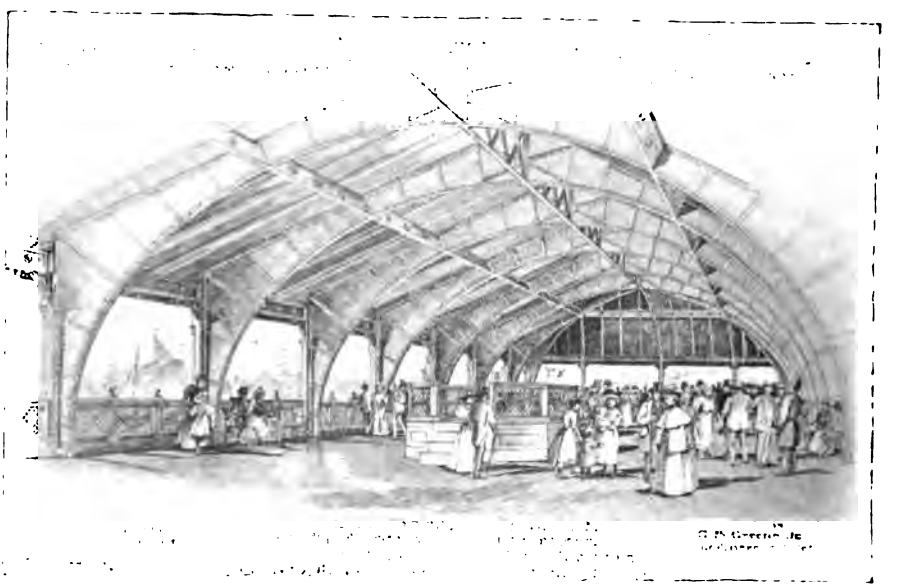
this country. Other progressive steps undertaken by the present administration of the city of Boston in the way of the direct employment of labor by the city, the erection of public baths, the establishment of a municipal printing plant, and an electrical construction department have attracted the attention and favorable comment of students of city government generally. The words of Mayor Quincy, to whom so much of this development is due, have been abundantly justified by events :—" The adoption of progressive and distinctive municipal policies of this nature raises the reputation and standing of the city, tends to bring its government closer to the people, and to promote a civic spirit which will yield valuable results in many directions."

LIBRARY
OF THE
UNIVERSITY
OF CALIFORNIA

Recreation Building
at foot of E. 24th Street.

1897

Department of Parks
of the City of New York.



RECREATION PIERS.

EDWARD C. O'BRIEN, Commissioner of Docks.

The Dongan, Cornbury and Montgomerie charters gave the water front of the city of New York to the Mayor, Aldermen and Commonalty for the uses and benefits of the inhabitants. Its use and occupation for commercial purposes only were but a partial fulfillment of these original charter conditions. From the earliest period of the city's history it was recognized that there were other uses to which the water front could be put advantageously, and among them were the improvement of the industrial conditions of the people of the State, and the promotion of the health and happiness of the city's inhabitants. The Legislature of the State of New York has given tangible recognition to the first of these ideas by setting apart six piers near the battery where farm products, carried by canal boats from the agricultural parts of the State, may be unloaded at a minimum cost to the shipper. The Legislature of 1892, which made provision for the first recreation pier, had both objects clearly in mind when it provided that "the upper story of each of the piers shall be set apart for public use, wholly free to the inhabitants of said city (New York) without interference to business occupants, and the lower stories of the pier shall be open to the use of boats and vessels plying upon canals, rivers and lakes of this State, which may bring merchandise to this city for sale therein."

During the early period of the city's growth, the value of parks—large and small—was but poorly appreciated. The argument that, for Manhattan Island, entirely surrounded by water, artificial breathing spaces were unnecessary, must have been potent with the officials charged with the laying out of that large section of the city south of Eighth Street, including the most important portion of the great East Side, where no parks or breathing spaces of any kind were located. Hardly an available piece of land was left not occupied by human habitation with the exception of Battery Park which was laid out in colonial times

for the use of the then existing aristocracy. Later, when it became apparent, that, not only had a mistake been made, but that it was the duty of the city to correct it, began the movement for more parks even at a cost of sacrificing valuable property. It also came to be considered possible to utilize the water front without injury to commerce so as to secure enjoyment from the pure, bracing air circulating up and down both rivers.

To secure this end, an agitation was begun, which led eventually to the passage of a law in 1889,* providing in a rather indirect way for recreation piers on the East River, but no action of any kind was taken to give effect to the measure by the then Department of Docks. The Legislature in 1892 again took the matter up and passed what is known as the Walker Bill,† more explicit in its terms, which specified certain piers to be set apart for recreation purposes. But even this act was not mandatory, and the question of setting aside any pier for the uses of the inhabitants was left entirely to the discretion of the Board of Docks, which did nothing to give the law effect.

The present Board of Docks was organized on May 1, 1895. Seventeen days later it took up this question and referred to the Engineer-in-Chief a resolution of the Board of Aldermen asking for roof gardens on several piers along both river fronts. The reply of the Engineer-in-Chief was to the effect that awning sheds had been erected on three piers, and that more time was needed to test their value and usefulness. Two weeks later he requested that the question "be held in abeyance until the needs and desirability of such structures are further shown." These statements of the Engineer-in-Chief appear to have reflected the opinion of the former Commissioners of Docks, who must have looked upon the building of awning sheds on three piers as the best kind of recreation resorts they could give the people. Of these awning sheds the Engineer-in-Chief reported that "in any but very warm weather they were wholly unused and were in the way of the proper business to be carried on upon the piers." After mature consideration the present Commissioners caused an examination of the question to be made. They also investigated the water front to ascertain the locality where recreation piers

* Chapter 509, Laws of 1889, amending Section 778 of the Consolidation Act.

† Chapter 398, Laws of 1892.

might best be built. After several unlooked-for delays, the contract was finally awarded for the first of the piers on March 23d of the present year

This pier, at the foot of East Third Street, is now completed and in use. A second one at East 24th Street will be opened on September 25th. At least three others will be ready for occupancy next season. The size and dimensions of the Third Street pier have often been described; it juts out into the East River in the widest place and almost at the apex of Corlears Hook. It is 60 feet wide, over 350 feet long, with a pavilion about 36 feet high to the roof. On this pavilion are settees to accommodate 500 persons, while the promenade floor extends through its whole length. The second of these recreation piers, erected at 24th Street, East River, is more than double the size of the one at Third Street. It is 722 feet long and attracts general attention from parties passing up and down the river because of its size and character. When lighted up by electricity it is, next to the Brooklyn Bridge, the most conspicuous structure on the East River. Like the Third Street pier, it is located in a crowded section of the city, accessible to tens of thousands of people. Both of these buildings are of the French Renaissance style of architecture. A site for the third pier has been chosen in Little Italy, in the vicinity of East 112th Street, and two others will be built on the North River at Christopher and West 50th Streets. The Little Italy building will be appropriately in the North Italian or Florentine style of architecture; that at Christopher Street, Roman or South Italian, while the 50th Street pier will probably be Colonial. A sixth pier at the foot of West 129th Street has been proposed, but is not yet definitely decided upon.

It has recently been proposed that one or more of these piers should be enclosed so as to make them available for use in winter. If this were done flowers and plants belonging to the city could be stored away in them and they might be used for taking sun baths. The idea has not yet been adopted but it is probable that the West 50th Street pier will be enclosed in this manner.

The foot of East Third Street was selected as a site for the first recreation pier because of the density of population in the neighborhood adjoining, and because of the scarcity of small

parks or breathing spaces in the vicinity. According to the report of the Tenement House Commission of 1894, some of the blocks a short distance away from this pier have a population of nearly one thousand to the acre—a condition of affairs not equalled anywhere else in the world. Recently several small parks have been projected or laid out in this section, and the Small Parks Commission is still engaged in the work of locating sites for others. This has suggested to me the propriety of concerted action between this Commission and the Board of Docks. I have written to Mayor Strong, who is a member of the Small Parks Commission, to say that both sides should work toge ther, and I expect to see an arrangement entered into whi ch will guarantee active and intelligent co-operati on.

The comparative value of recreation piers and small parks is a subject that invites investigation. In my opinion, the pier gives more satisfactory returns. It takes the place of the seaside resort, in a measure, and gives to those who frequent it the benefit of the breezes from the bay and river, as a compensating equivalent for the trees, grass and flowers of the park. Only the means for bathing are absent to make the pier a substitute for Rockaway or Coney Island as a resort. Bathing facilities cannot now be supplied, as under the existing law the lower decks of all piers used for recreation purposes must be set aside for the reception of country produce. Should it be decided to build several other recreation piers the number of lower decks reserved for this purpose would be far in excess of the demand. A change in the law to permit the use of the lower decks of recreation piers to be built hereafter for bathing and other purposes would seem desirable. This combination would give the people sea air and salt water bathing at all seasons. Again, the cost of a pier is inconsiderable compared to that of even a very small park. The value of the land for the largest pier—that at the foot of East Twenty-fourth Street—the cost of the pier itself and that of the buildings aggregate $250,000 ; while $1,000,000 and sometimes $1,500,000 is spent on laying out a small park. Under existing conditions and until the law is changed, the use of the pier for commercial purposes is not interfered with, so that the cost of the superstructure

is all that is properly chargeable to the account for furnishing relief to the people. This is only $100,000.

To make the piers more attractive, the Board of Docks decided on having music furnished each week-day evening. For the music at the Third Street pier, $462 a week is paid, and the city receives $213 a week for privileges. The salaries of the sixteen attendants amount to $935 a month. Order is maintained on the piers by the regular police force. The attendance on the pier in the afternoon ranges from 500 to 2,000, according to the conditions of the weather. In the evenings it averages from three to four thousand, and on very hot evenings has reached as high as 7,000.

Since the Third Street pier has been turned over to the people I have made several visits to the place during the day, when it was occupied almost solely by mothers and little children, and during the evenings when the fathers and bread winners of the family, and the young people of both sexes congregated to breathe the pure sea air and enjoy strains of music. On very hot days when the city sweltered under the torrid rays of a scorching sun, young mothers by the hundreds could be seen with babies in their arms occupying the settees, and many of them eating luncheons purchased at the pier at the prices which prevail in our public parks. On the promenade at night when thousands gathered, could be seen a cosmopolitan collection of human beings not to be duplicated anywhere else in the world. The strong, intelligent faces and sturdy physiques that characterize so large a part of our East Side population, indicate hard knocks and rough usage received in the struggle for existence. When the band plays a popular air the musical instinct which seems to be a part of their nature asserts itself, and they can be heard humming to the accompaniment of the band playing "Rosie O'Grady," or the air of some other song. This musical instinct is one of the most conspicuous characteristics of the people coming to the pier, the major part of whom are Polish or Russian Jews, with a strong admixture of Germans, Hungarians and other nationalities. When the band ceases to play about 10:30 P.M., they disperse in as orderly a manner as the average New York crowd leaving a theatre. It is impossible to visit this Third Street pier either in the day or evening and see

the thorough enjoyment gotten out of it without concluding that the welfare of the community has been materially benefited, and the health and happiness of the people improved by its erection. Withal it is one of the cheapest and most effective methods of promoting order and harmony among the people ; and of inculcating in them respect for the laws and for those charged with their administration.

THE LABOR QUESTION IN THE DEPARTMENT OF STREET CLEANING OF NEW YORK.

By Geo. E. Waring, Jr., Commissioner.

During the first year of my administration as Commissioner of Street Cleaning, I found that in the maintenance of discipline frequent appeals from my decisions were made by the men. These decisions were necessarily based mainly on official reports. In order that no employee should be treated unjustly, I undertook, in the beginning, either to give each complainant a hearing myself, or to deputize some other official to do so for me. This occupied so much time as to interfere with the regular Department business, and was by no means always satisfactory to the men themselves.

After a study of the Belgian method of "Arbitration and Conciliation," and of the experiences in this country of the Mason-Builders and the Bricklayers, I conceived a scheme which would afford the men an ample hearing before a competent and unprejudiced committee of their own creation. The earlier stages of each investigation would be absolutely under the control of this committee, and the entire force would be in close touch with its work.

The feature of this scheme which requires a preliminary consideration of all questions, whether personal or general, by a body constituted entirely of representatives of the employees themselves is, I believe, original.

Early in January, 1896, I addressed the following unofficial communication to the employees of the Department:

"In order to establish friendly and useful relations between the men in the Working Force and the Officers of the Department, I shall be glad to see an Organization formed among the men for the discussion of all matters of interest.

"This Organization will be represented by five Spokesmen in a 'Board of Conference,' in which the Commissioner will be represented by the General Superintendent, the Chief Clerk, one District Superintendent, one Section Foreman and one Stable Foreman.

"It is suggested that the men who gather at each Section Station and the men at each Stable (with the boardmen from the nearest Dumps), each elect one of their number to represent them in a General Committee of 41 (32 from Section Stations and 9 from Stables), and that this General Committee elect the five Spokesmen by whom it is to be represented in the Board of Conference.

"The General Committee will meet in a room to be provided for them, at 2 P. M. on every Thursday, except the third Thursday of each month. The members will not have their time docked for this. Their meetings will be secret, and they will be expected to discuss with perfect freedom everything connected with their work, their relations with the Commissioner and his subordinates, and all questions of discipline, duties, pay, etc., in which they are interested, or which their Sections, Stables and Dumps may have submitted to them.

"The Board of Conference will meet at 2 P. M. on the third Thursday of each month, or as near to this date as the exigencies of the work will allow.

"The ten members of the Board of Conference will be on a perfect equality. It will establish its own Organization and Rules of Procedure, and will elect one of its members Permanent Chairman and another Permanent Secretary, one of these to be chosen from the five Officers and another from the five Spokesmen.

"It is hoped that this Board will be able to settle every question that may come up, to the satisfaction of all concerned, because most differences can be adjusted by discussions in which both sides are fairly represented.

"Should any matter arise as to which the Board cannot come to a substantial agreement, the Permanent Chairman and the Permanent Secretary will argue the case before the Commissioner, who will try to reach a fair conclusion upon it."

In conformity with the foregoing call, the Sweepers and Drivers organized the Committee of 41, representatives being chosen entirely by themselves. This Committee, after several meetings, elected from its number five men—three Sweepers and two Drivers—to represent them in the Board of Conference.

The Board of Conference held its first meeting February 20th, 1896. Every appointee was present, and in organizing the Board a Sweeper was unanimously chosen as Permanent Chairman and the Chief Clerk as Permanent Secretary.

The following is taken from an account of the operations of the system written by the Secretary of the Board of Conference:

"From the beginning, it was evident that a large number of the men had a very full appreciation of the purpose of the plan. They welcomed it in a manly spirit, and entered heartily into every detail of organization. This was the more strange, in view of the radical change of venue, as it were. A large percentage of the men were members of, and amenable to, organizations which had existed in the Department under former administrations, and the influence from these sources could not be expected to cease without an effort on the part of those whose success depended upon dissensions which might occur, or which they could create, between the Commissioner and the men, and who often deceived

and misled into serious and embarrassing situations, those whose interests they were supposed to have at heart and to protect.

"Aside from those identified by membership with these organizations, there were many, not members, who held a latent sympathy with the old system of settling difficulties by strikes. In fact, it was generally understood that wrongs must be either borne or righted by coercion. Arbitration was looked upon as a far-off theory, applicable, perhaps, at times, somewhere and under certain conditions; but the idea of its adaptation to and adoption by a municipal department of the City of New York, and especially by the Department of Street Cleaning, where political preference was the only rule they had ever known, had never entered their minds. In fact, they were warned by sceptics, both outside of the Departnent and among themselves, to 'look out for Waring; this is one of his tricks.' That any Commissioner of Street Cleaning, even though he were an 'angel,' should honestly intend, and honestly endeavor to deal fairly with the rank and file of those under him, was too much to believe. There must, they thought, be some sinister motive behind it.

"Gradually, however, the better element among the men did believe in it, and as their faith grew stronger, the malcontents were either converted or thrust out, and slowly, but surely, the Committee of 41 became a body of earnest and honest co-operators with the Commissioner towards the mutual confidence so essential for contentment on the part of the men, and without which the best results, from the combined efforts of the Commissioner and themselves, could not be expected.

"A very false impression obtains among the public at large, that the men constituting the membership of the Department Sweepers and Drivers are below the average in intelligence and acumen. This is not the case. Not all of them have enjoyed the advantages of a scholarly education (although some of them have), but it would be a happy day for this country were the average legislator to display the fairness and judgment of these men who have been chosen by their respective constituents as representatives.

"Of course, in the beginning, and while the proposed plan of arbitration was an unknown quantity to the men, and they themselves unknown to each other, deadwood drifted in and disturbing

spirits appeared, but, as intimated above, this element was soon detected, and, in an orderly manner, eliminated.

"The Committee of 41 has, since its first meeting, met every Thursday, except the third Thursday in each month. Their meetings are held with closed doors, and their discussions have, therefore, been free from any surveillance or influence, and, as was intended, entirely private and unrestrained.

"Perhaps the best way of explaining the general character of the work is to cite illustrating sample cases. For instance:

"Driver 'A' of Stable D has been reported by an inspector as entering a liquor saloon during working hours, and in full uniform, and remaining inside for ten minutes; this in violation of a very important rule, the penalty for the second offence being dismissal. Driver 'A' admits entering the door of the saloon, and also admits remaining inside for ten minutes, but has an explanation to make as to his reasons for so doing. Argument in such cases cannot be allowed, lest the officers of the Department would have time for little else than to listen to lame excuses and bogus explanations. Driver 'A' has now, however, another recourse. He calls upon his representative in the 'Committee of 41' and explains the matter to him fully, confirming his statement in writing. His representative submits the case at the next meeting of the committee, and there the plea of 'A' is read and discussed by his co-laborers. His explanation is that the door which he entered is one of two leading to the saloon, but which also leads to a tenement in the rear of the saloon, in which he has his home. It appeared from his explanation that his wife had been confined recently, and that, as his home was on his way to the garbage dump, his natural anxiety prompted him to stop for a moment. He submitted in confirmation of his statement the certificate of a reliable physician in the neighborhood, in whose hands his wife's case was, and, having requested his foreman to accompany him to his home, submitted a letter from him substantiating his statement. He also produced letters from both his foreman and his District Superintendent stating that he was never known to have been under the influence of liquor, nor had he ever been charged with entering a saloon before. These officials said that he was a reliable and careful driver.

"At their next meeting the committee investigated the matter,

and after gathering confirmatory testimony, is persuaded that 'A's' claim is a just one, and, therefore, referred the case to the Board of Conference, with such additional light as it had been able to obtain. This Board is so constituted that no matter what the character of the case referred to it by the Committee of 41 may be, there is always one member representing the Commissioner qualified by his position and experience to judge of its merits.

"The man has now taken his case two steps toward the Commissioner, and thus far without the latter's knowledge. To facilitate quick adjustment, these matters are, before being considered by the Board, referred in an informal way to one of its official members. This official brings with him to the meeting the result of his informal investigation and copies of the Department records relating to the case. Thus, the Board is able to consider 'A's' claim impartially, and also to determine its truthfulness. After due consideration, the matter is referred to an official in the Department having charge of such business, with the recommendation that the fine be remitted.

"By the foregoing process a budget of papers relating to each case is arranged in chronological order and submitted to the Commissioner, who at a glance can comprehend it from beginning to end and quickly decide as to its merits. A report of his decision is added to the budget and transmitted by the Secretary of the Board of Conference to the Secretary of the Committee of 41, and it, among others, is read to the Committee at its next meeting. In the case in question, where the Commissioner's decision was in favor of the man, the amount forfeited by 'A' was credited to him on the next pay-roll.

"The following case is somewhat different in character:

"At one of the Board meetings a communication was received from the 'Committee of 41,' calling attention to an ordinance of the city requiring householders to clear snow from the gutters in front of their premises, and pointing out the very great saving in expense to the city which would result were the ordinance enforced. Not only would it be a saving to the city, but it would afford quick relief to the public at crosswalks, which would otherwise be flooded in wet or thawing weather if there were snow on the ground. This matter was carefuily considered by the Board,

and referred direct to the Commissioner, with the suggestion that he request the assistance of the Police Department. The Commissioner thanked the Committee for its suggestion, and immediately took the matter up anew, having already conferred with the Police Department on the subject.

"It might appear at first glance that the machinery, as indicated above, is cumbersome and the process slow. Such, however, is not the case. The system is so precisely arranged that when once a case has been started it goes along without delay. No case need remain unsettled for more than thirty days after its submission to a representative or to the Committee of 41 direct, and, as a matter of fact, very many cases are settled by the Committee of 41 in half that time or less.

"The matters referred by the Committee of 41 to the Board of Conference vary in character. They are not all complaints. The Board frequently receives suggestions from the men as to improvements in the department service, or, perhaps, for some modification or change of a rule. A number of these suggestions have been approved and adopted, and the service has been benefited thereby. Of course there are many cases submitted to the Committee of 41 which are so trivial that they are thrown out of Court at once, and never reach even the Board of Conference. Occasionally, however, a complaint of this character does get through, perhaps inadvertently, and reaches the Board, but it ends its career there.

"Of all the cases considered by the Board of Conference during the first year, there was but one upon which it could not agree. On this case the Board was divided evenly; the representatives of the men on one side and those of the Commissioner on the other. This liability to a deadlock had been anticipated in the original call and provided for; accordingly, the Chairman and Secretary of the Board argued their respective sides of the question before the Commissioner. This case occurring toward the end of the year was a novelty, and, as the members of the Board were very earnest in their respective convictions, the matter was watched with much interest, it being considered, as it were, a test case.

"The Commissioner's decision in the matter was in favor of

the complainant, and the fine which had been imposed was remitted. He stated, however, that—

"technically, and in accordance with all rules of discipline, the fine was a just one, and should be imposed in all similar cases. At the same time, I cannot avoid the feeling that this violation was made for no improper reason, and perhaps with a laudable desire to help the service; and, in any case, probably the ends of justice and discipline are as fully satisfied by the mental anxiety to which the Driver has been subjected, and the full discussion the subject has received in the 'Committee of 41' and the 'Board of Conference,' as they would be by the enforcement of the penalty. I therefore, direct that the fine be remitted."

The following is a brief statistical statement of the year's work of the Board of Conference, and relates entirely to cases referred to it by the "Committee of 41," or matters brought up by the members of the Board, representing the men:

Matters explained satisfactorily at the same meeting at which submitted	15
Fines remitted or reduced	22
Fines sustained	13
Suggestions from employees for the comfort and convenience of the men, or for the betterment of the Department service approved and acted upon by the Commissioner	24
Cases considered by the Board, but on which it determined that no action should be taken	14
Employees dismissed, reinstated upon satisfactory evidence that the dismissals were unmerited	8
Employees dismissed, but because of unsatisfactory explanations not reinstated	17
The total number of cases considered by the Board was	124

—— an average of over 10 for each meeting.

"The above is in no way connected with the statistics of cases considered, or matters discussed, at the meetings of the Committee of 41."

During the year the Committee of 41 considered 345 cases, of which 124 were referred to the Board of Conference, 221 being settled satisfactorily by itself.

So far as I have been permitted to judge, the system of arbitration as above outlined has appealed to the men as a straightforward and perfectly open channel for the communication of their grievances; and the officers of the Department who are in closest relations with the employees so describe the general prevailing feeling. In the beginning, however, as has been said already, this feeling was tinctured with a quite natural suspicion that the scheme was a cut and dried affair, and that the delegates elected would be so subservient to official influences that their consideration of the various cases coming before them would, under the flattery of implied power, be merely perfunctory. In other words,

it was regarded as a sop, to stay the growth of that repressed bitterness under a sense of injustice and injury—real or fancied—which, in the old days, had so often culminated in an outbreak that was the only method known to the men of asserting themselves, and whose power for causing harm and suffering to the people of the entire city they so well appreciated.

Except for an occasional malcontent, whose dismissal is the consequence of some offence so flagrant and apparent that his case receives but scant consideration in the Committee of 41, we no longer hear that the delegates are the Commissioner's men, and not the laborers' representatives. Indeed, the men themselves realize that the preponderance of leaning so far has been towards their side—the five officers representing the Commissioner in the Board of Conference, in their desire to be perfectly fair and to avoid even the appearance of arbitrariness, preferring to exercise too much leniency rather than too little.

The Committee of 41 corresponds in one way to any other representative body ; but it is a great deal more. Each one of its members is elected by a small circle of men, to every one of whom he is intimately known through the association of daily labor performed in common. This man must jealously watch and guard the interests of his constituents, or be obliged by them to give place to one who will do so. But the most marked difference of all lies in the fact that the delegate is forced to present the complaint of any one of his constituents to the Committee of 41. He has no chance for the display of favoritism nor can he be the recipient of bribes from individuals or lobbies. There is always a hearing for any constituent, however weak or preposterous his plea. Should he, however, be refused by his delegate, or should his case be neglected, he may go directly before a member of the Board of Conference and receive a sanction for the consideration of his complaint by the Committee of 41. Furthermore, the session of the Committee of 41 is never adjourned *sine die* and no case can be crowded out or rushed through for lack of time.

As will readily be seen, a delegate in his daily associations is under constant surveillance by his constituents. All of his working hours are office hours for his fellows, and he can escape their importunities only by resignation. Some of the men who have found the position the reverse of the honorable sinecure they were

seeking have given way to others who are prepared to assume, at a considerable sacrifice and with unselfish zeal, the extra work and the great responsibility entailed. It is only fair to the laboring man to say that among no other class is this disinterested devotion to the welfare of his mates more frequently met with.

The presence of a delegate in each of the divisions of the laboring body is, in its way, a check upon the conduct of the foremen. Discipline, which is the life of the Department, is in no manner interfered with. On the contrary, it is effectually freed of the objections so often resulting from the excessive use of authority. Harshness, loud-mouthed profanity and brutality are not likely to be indulged in by foremen in the presence of so powerful an intermediary as the delegate. Naturally he is not allowed to interfere actively. During his working hours he is a laborer pure and simple, and superiors must be obeyed no matter how unjust or unreasonable they may be. His power begins only with his weekly appearance as a member in the Committee of 41; where, alone with his fellows, he is given the opportunity of stating his case with any degree of heat that may seem to him fitting, and with the certainty that it will be judged by no one but laborers with similar associations and like sympathies. The Committee transmits it, divested of all incidents of passion, to the Board of Conference, where the laborer is, for the nonce, on an absolute equality with his officer.

Thus far our arbitration system has proved a most gratifying success, and it is with much pleasure that I note its endorsement by practical business men and large factory owners. It has, I am firmly convinced, a bright and growing future, not only as far as this Department is concerned, but in the general adjustment of the labor question throughout the country.

I indulge the hope that the modest experiment here described may prove—in its expansion—to be a factor of no inconsiderable importance in the ultimate solution of vexed questions of difference between employer and employed. Even if it be shown to be limited in sphere to its present field of action, its creation has certainly not been in vain. The benefit it has conferred on this Department by suppressing the tendency to strike by the creation of an *esprit de corps* and by cementing men and officers together in a bond of common sympathy and fellow feeling has been of in-

calculable assistance toward the results I have striven to achieve. It has not only furnished a channel for settling individual grievances, but it has prevented misunderstandings between the men and their Commissioner and has given him the means for ascertaining their real feelings in regard to changes in policy, new rules, methods and equipment. In a word—with but little labor and the slightest tax upon his time—it has brought him face to face with every one of his three thousand employees.

MUNICIPAL STATISTICAL OFFICES IN EUROPE.*

By Dr. Edward M. Hartwell.

The principal municipal statistical offices in Europe have been organized so long (though, as a class, state and ministerial statistical offices are much older) that their usefulness and efficiency is fully recognized, both by those engaged in the practical administration of municipal affairs, by students of such affairs and by the educated portion of the general public. The example of the larger cities in establishing statistical bureaus is being gradually followed by the smaller cities upon the continent. The directors of such bureaus constitute a highly trained class of expert civil servants. The dignity and importance of their position is generally recognized, and their tenure of office is conditioned on efficiency and good behavior—not on political activity or "influence."

* The materials for the article on "Municipal Statistical Offices in Europe" were gathered at the request of Mayor Quincy by Dr. Edward M. Hartwell, Director of Physical Training in the Boston Public Schools, during a recent visit to Europe undertaken primarily for other purposes, and embodied in a very full and excellent report to the City Council of Boston (Boston City Document 94, 1897). Even before the publication of Dr. Hartwell's report, there had been established a Department of Municipal Statistics in Boston, with offices at 71 City Hall Building. Mr. Laurence Minot is Chairman of the Advisory Committee of the Board, and Davis R. Dewey, B. Rodman Weld, Sumner B. Pearmain and William Jackson (City Engineer ex-officio) are members. Dr. Hartwell, who was formerly a member of the Board, resigned on September 1st, in order to assume the position of secretary of the department. In this connection it may be interesting to note that some time before Dr. Hartwell's report was presented to the Boston City Council, provision was made in the Charter of the Greater New York (Chapter V, Secs. 128–138, pp. 53–56) for a Bureau of Municipal Statistics, "for the purpose of collecting, keeping and publishing * * * such statistical data relating to the city as shall be deemed of utility or interest to the City Government or its citizens." The Chief of the Bureau is to be appointed by the Mayor for a term of four years, and is to receive an annual salary of $3,500. The work of the Bureau is to be directed by a Municipal Statistical Commission, to consist of not less than three nor more than six members, exclusive of the Chief, who is ex-officio a member and the Chairman of the Commission. The members of the Commission are to be appointed by the Mayor for terms of six years, and are to be chosen with special reference to their qualifications to give expert advice upon statistical subjects. The other provisions of the Charter for this new bureau are equally progressive and adequate. It is to be hoped that the movement for better statistical service thus inaugurated in New York and Boston will be imitated in other cities of the country, and that their present chaotic reports may eventually be reduced to a system that will permit of intelligent comparison.—[Editor's Note.]

In Germany, for instance, there is an association of city statisticians which meets periodically, usually annually, to consider questions relating to their profession. At the meeting of the association held last autumn twenty-one German cities were represented. In the case of German cities, the directors of municipal statistical departments have arrived at so good an understanding with each other that they have combined to issue a "Statistical Year-book of German Cities," which presents comparative tables for most of the principal cities in Germany regarding matters which receive fuller treatment in the city statistical year-books, whose characteristics I shall speak of further on.

In general, the municipal statistical offices of the continent are under the responsible charge of a director, though certain general matters connected with departmental appropriations and the general policy of the office are taken cognizance of by a statistical commission or deputation, composed of certain representative city officials, or of representatives of the city government and of representatives of various scientific bodies. In the larger statistical offices the immediate subordinates and assistants of the director are scientifically trained statisticians, usually university graduates, besides whom a permanent force of calculators and clerks is maintained. From time to time, as exigencies arise, as, for instance, at the time of taking the city census, the office force is increased by additional temporary clerks and assistants.

The oldest department of municipal statistics belongs to the city of Paris, whose "Service de la Statistique Municipale" constitutes a department of the Prefecture of the Seine. Between the years 1816 and 1850 statistical publications concerning the city of Paris to the number of six volumes were published. For a time, between 1856 and 1864, statistical activity languished; but in 1864 a new series of monthly publications, containing general statistical information relating to the city of Paris and its administration, was established. This series continued until 1879, when a "Bureau Central de Statistique" and a Municipal Statistical Commission were organized by the Prefect of the Seine. The "Annuaire Statistique de la Ville de Paris" has been published since 1880. Weekly bulletins have been published since 1880, and monthly statistical tables since 1885. Besides these, the census of population, taken in 1881, 1886 and 1891 has been published by

the bureau. The bureau has also published a graphical atlas of statistics, which appeared in 1890. The cities of Amiens, Bordeaux, Havre, Lyons, Nancy, and Reims, publish "Annuaires Statistiques" or statistical year-books; and Bordeaux and Lille have statistical offices; but for the most part the cities of France do not possess thoroughly organized offices for statistical purposes.

In Belgium the Bureau of Hygiene and Demographical Statistics of Brussels was established in 1860.

In Germany the oldest of the municipal statistical offices date for the most part from the decade 1860–70. They are more numerous in Prussia and Saxony, having developed more slowly in Central and Southern Germany. The city statistical office of Berlin, which is recognized as a model institution, dates its beginnings from 1862. It was maintained provisionally for ten years. It was permanently organized in 1872. Dr. R. Böckh has been its director since 1875. The statistical publications concerning Berlin are as follows: Yearly Report of the Statistical Office of the Royal Police Department of Berlin, 1852 to 1854; Statistical Year-Book of the City of Berlin since 1868; weekly and monthly reports, concerning the movement of population, with annual supplements, since 1872; census reports, 1861, 1864, 1867, 1871, 1875, 1880, 1885, 1890; movement of population from 1869 to 1878, and wages statistics since 1880. All but the first mentioned have emanated from the city statistical office.

The principal municipal statistical offices at present existing in Germany are found in the following-named cities: Altona, Berlin, Breslau, Chemnitz, Cologne, Dresden, Frankfort, Goerlitz, Leipzig, Mainz, Magdeburg, Münich, Strassburg and Stuttgart.* Bremen,

* The following data may serve to indicate the character of the personnel and the cost of maintenance of the statistical offices in certain leading cities of Germany:

I.—*Berlin.* (Pop. 1,579,244.) See p. 532 *et seq.*

II.—*Breslau.* (Pop. 335,186.) The statistical office of the city of Breslau in 1892 consisted of a director and two scientifically trained assistants, two permanent officials in the line of promotion and six others, besides five temporary clerical assistants, engaged in preparation of census material, and one bureau servant. The appropriation for 1892–93 for salaries, wages, etc., was 22,089 marks; rent of office, 1,900 marks; publications, 3,675 marks; sundry expenses: library, heating, lighting, etc., 1,266 marks. Total, 28,880 marks. Extra allowance for work upon census material, 2,500 marks.

Hamburg and Lübeck, which were formerly free States or city States, maintained statistical offices, which were State offices before those towns were absorbed in the empire of Germany.

In Austria-Hungary the municipal statistical offices of Vienna and Budapest hold the leading rank. Cracow, Prague, Lemberg and Trieste, among Austrian cities, also have municipal statistical offices.

In Russia, St. Petersburg has a municipal statistical office which has issued a statistical year book since 1882, and a bulletin since 1881. Moscow, Odessa and Warsaw also have municipal statistical offices, and Reval and Riga issue statistical publications of one kind and another from time to time.

I visited several of the principal cities of Great Britain, but found no organization in any of them corresponding to the municipal statistical office which has now become a usual feature of municipal administration in the leading cities on the continent. But it should be said that the London County Council has organized a statistical department. Usage in Great Britain is somewhat similar to that which obtains in this country. More or

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III.—*Cologne.* (Pop. 281,681.) The statistical office of the city of Cologne, personnel: Director, scientific assistant, two permanent officials, and ten subordinate officials. Salaries, 8,900 marks; clerical assistants, 6,000 marks; books, 150 marks.

IV.—*Dresden.* (Pop. 289,844.) The statistical office of Dresden was established in 1874. It consisted in 1892 of a director and director's assistant, and a further force of eleven persons, three of whom are permanent officials in the line of promotion. The appropriation for 1892 included salaries, etc., 14,500 marks; office expenses, 3,600 marks; cleaning, heating, and lighting, 740 marks; work on census of 1890, 3,600 marks.

V.—*Leipzig.* (Pop. 357,147.) The personnel of the statistical office of the city of Leipzig consisted of a director, two permanent officials, and fourteen other assistants. The appropriations for the maintenance of this office in 1892 were: Salaries, director 4,800 marks; secretaries, 2,280 marks and 1,320 marks, respectively; clerk, 1,200 marks; total, 9,600 marks. Clerical assistants, 7,600 marks; printing, 800 marks; postage, bookbinding, etc., 950 marks; insurance, 400 marks; extraordinary expenses in connection with census, 3,000 marks; total, 22,350 marks.

VI.—*Münich.* (Pop. 350,594.) The statistical office of Münich, in 1892, consisted of a director, director's assistant, two permanent officials, three subordinate officials. The ordinary salary charge amounted to 14,400 marks; extraordinary appropriation on account of census work, 3,000 marks; ordinary office expenses were 3,600 marks, and extraordinary office expenses equalled 2,500 marks.

For data on Altona, Chemnitz, Frankfort and Magdeburg, see p. 5 of Dr. Hartwell's report to Mayor Quincy, Boston City Document, No. 94, 1897.

less information of a statistical nature is published from time to time by various departments of the city government. The statistics relating to financial affairs and to public health are sometimes presented in a summarized and compact form. Very much of the statistical information contained in the corporation reports and publications of such cities as Glasgow, Liverpool and Manchester is interesting and valuable, though from the point of view of the statistical expert it is diffuse and undigested.* The municipal statistical offices of the continent are organized for the purpose of bringing together in compact and convenient form data tending to show the whole range of municipal activities so far as they can be represented in numerical tables. The census of the city is commonly taken by the city statistical bureau.

STATISTICAL BUREAU OF PARIS.

The annual publication of the Statistical Bureau of Paris, entitled "*Annuaire Statistique de la Ville de Paris*," † for the fourteenth year of the series, 1893, was published in 1895. It includes 686 pages, quarto; 638 being text and the remainder index, besides a considerable number of lithographic charts. The population statistics, educational statistics, statistics relating to transportation and traffic, and the statistics relating to markets and the sale of provisions in Paris, given in the *Annuaire Sta-*

* I am now speaking only of the *city* documents. Extended reports are made by all authorities—municipal included—to the Local Government Board, which publishes them annually in a volume of the Sessional Papers under the title, "Local Taxation Returns." The reports are digested by the Board and published in a condensed form. The student will find them full of valuable information, and so systematized as to be readily accessible.

† The principal rubrics under which the material of the *Annuaire Statistique* is arranged are as follows:

First Part.—Meteorology and climatology, public ways and promenades, water service, navigation, scavenging, sewers and disposal of sewage.

Second Part.—Demography. Marriages and divorces, births and still births, deaths, and still births.

Third Part.—Various matters, such as municipal finances, including budget and accounts of the city of Paris, octroi, direct taxes, provisions, cattle market, abattoirs, Halles centrales, central wholesale market, Bercy entrepôt, public scales, bread, wheat, flour, municipal chemical laboratory, consumption of articles of food, burials, morgue, lighting, post and telegraph, savings banks of Paris, *justice commerciale*, election statistics, transportation, education, city libraries, public assistance, the insane, city night refugees, public charity, night medical service, assisted children, morally abandoned children, protection of young children, work of minor boys and girls employed in industry, pawnshops, insanitary dwellings, classified business establishments, arrests, courts and tribunals, service of identification of the prefecture of the police, civil prisons of the Seine, municipal police, fire-brigade, fires and recruiting.

tistique are particularly well classified and full. In many matters of importance, as, for instance, births, marriages, and deaths, statistics are given for the different sections of the city, which correspond to our wards and precincts. In the case of many important tables it is possible to compare the totals with the totals for the five previous years. The budgetary financial accounts are remarkable for their condensation and comprehensiveness. The statistics regarding passenger and freight traffic of the different railroads entering Paris are also noteworthy, on account of the amount of information which they contain in conveniently presented shape. The statistics relating to public institutions, particularly hospitals, are full and interesting.

The weekly bulletin of municipal statistics "*Bulletin Hebdomadaire de Statistique Municipale*," published by the bureau, of which Dr. J. Bertillon is chief, treats of the following subjects:

1. *Meteorological observations.* These relate to observations made at two separate observatories, as to the state of barometer, temperature, humidity, prevailing winds, and precipitation of moisture.

2. *Demography.* Births and deaths reported to the bureau analyzed according to legitimacy, absolute numbers and proportional numbers by year and by 1,000 being given. The proportional numbers relate to the marriages, births and deaths for the week, also the mean for the years 1887 to 1891, and annual mean for France from 1886 to 1890. Deaths are analyzed according to the principal causes of death, for persons; under 3 months of age, 3 to 11 months, 12 to 23 months, 2 to 4 years, 5 to 19 years, 20 to 39 years, 40 to 59 years, 60 years and above, and with respect to sex. Death rates at certain selected ages, according to the week in question, *e. g.*, 34th week of 1896, and also according to the mean for five years are given at the foot of the table; these serve to give a clearer idea of the real meaning of the figures in the table than if only the absolute numbers were given. The table shows also the changes in the hospital population suffering from the principal epidemic and contagious diseases for the week. A table showing the number of marriages, births, still births, infants placed out at nurse, pupils in schools attacked by epidemic diseases, is classified according to sex for each of the twenty arrondissements of the city. A table is given also showing similar facts for the hospitals and prisons. Another table is devoted to showing the distribution of deaths, according to the cause of death and residence, during the week in eighty separate residence districts. In this table the population at the last census for each of the eighty districts is shown as aiding the interpretation of the number of deaths occurring in each district, which deaths are classified, also, according to the principal groups of causes. *In this table deaths occurring in hospitals, are apportioned to the quarters where the decedents had their residence.*

The Bulletin also contains a diagram showing the number of deaths from certain specified contagious and infectious diseases in each of the eighty residence quarters of the city. It contains also

the report of the municipal disinfection service, analyzed according to diseases, source of demand for disinfection, and by arrondissements. It contains also a carefully analyzed report by residence districts of the operations of sanitary police concerned in the report and isolation of cases of infectious disease. It contains a diagram showing fluctuation in the number of cases of the principal infectious diseases for the four weeks previous.

The character of the contents of the monthly tables relating to the municipal statistics of Paris, "*Tableaux Mensuels de Statistique de la Ville de Paris*," is indicated by the following rubrics taken from the issue for March, 1896. This includes forty pages of printed matter devoted to tables arranged under the following principal heads:

Climate.—Meteorology. Summary of remarks in the weekly reports; height of water in the Seine; microscopical analyses of the air and water; chemical analyses of air and water; chemical and bacteriological analyses of sewage water, etc.

Movement of population (*démographie*).—Marriage, divorces, births, according to office making report; acknowledgment and legitimation of illegitimate children; duration of gestation of the still-born, by civil status; births and still births by sex, by civil status, by arrondissement and quarter according to the domicile of the mother; deaths classified by age and sex, for 161 causes of death; principal causes of death, according to the residence of the decedents; recapitulatory view; movement of hospital population; names of the diseases by which the sick in hospitals were affected, showing number discharged, number who died, with distinction of age, as to children and adults, by sex; bureaus of public assistance; cases of epidemic disease, treated by physicians of the bureaus of public assistance, at the home of the sick person; free vaccinations; municipal disinfection service; municipal ambulance service for sick and wounded; accidents registered at the prefecture of police.

Prefecture of Police.—Nurses applying for registration at the prefecture of police; movement of the insane in special infirmary; demographical bulletin relating to births, deaths, marriages, etc., in communes of the department of the Seine outside of Paris; sanitary statistics of the same.

Cemeteries and Funerals.—Burials in the cemeteries of Paris, classified according to nature of permit, character of funeral service; same by arrondissements; cremations.

Food Supply (*approvisionnement*).—Business of the cattle market at Villette; business of the abattoirs, in respect to animals received and provisions issued for use in Paris and elsewhere; butchers' meat, by total amount and by mean retail price, by kind and cut; poultry, game, etc., by price and quantity; price of flour; assize of bread; wholesale business in fish, oysters, butter, eggs, cheese, fruits, vegetables; seizures made by the service of sanitary inspection of slaughterhouses; markets, wholesale and retail stalls at the central halls; municipal chemical laboratory; octroi.

Gas; distribution of water; water supply; scavenging; sewerage; irrigation; liquors; savings banks of Paris; postal savings banks; pawn shops; declarations of

insolvency; market for horses, vehicles and dogs; permits to build; circulation-traffic: general omnibus company, movement of passengers; tramways and railways belonging to the omnibus company; tramway traffic of other companies than the omnibus company; passenger traffic of the belt railways of Paris; movement of passengers in the great railway stations of Paris; movement of travellers at hotels, boarding houses, etc.; Paris boats, movement of shipping in the canals of Paris; fires, their principal causes, means taken to extinguish them; arrests, service of identification by anthropometric means.

City Statistical Office of Berlin and its Publications.

The estimate of expenses for the fiscal year beginning April 1, 1896–97, for the maintenance of the office was as follows:

Salaries.—Director, 8,400 marks; director's assistant, 4,200 marks; special assistant, 2,700 marks; second special assistant, 2,160 marks; chief clerk, 5,400 marks; magistral secretaries (1) 3,600 marks, (2) 2,900 marks, (3) 2,600 marks; for clerical assistants in the office (21 regular male assistant clerks and 10 female assistant clerks and temporary clerical service on occasion), 45,000 marks; calculator, 3,000 marks; remuneration for sundry extra unusual forms of service, 3,450 marks.

Office Expenses.—Writing materials, paper, etc., 2,000 marks; printing, 10,500 marks; book binding, etc., 1,100 marks; increase of library, 800 marks; for sundry expenses, 1,100 marks.

The Berlin office publishes from time to time, as occasion may demand, supplements containing special statistical studies, as, for instance, "Supplement I. for 1894," which contains tables showing the movement of the population of the city of Berlin in the year 1894. This supplement comprises 66 pages, folio. It includes four general rubrics—(a) births and legitimations, (b) deaths, (c) marriages and announcements of intention of marriage, (d) departure from and arrivals in Berlin.*

The statistical office publishes weekly reports concerning marriages, births, deaths, meteorological conditions, etc.; and monthly summaries concerning the same matters of record.

The census of the city of Berlin is prepared and published by

* For detailed statement of the sub-heads included under these four general heads, see p. 10 of Dr. Hartwell's report to Mayor Quincy, Boston City Document No. 94, 1897.

the City Statistical Office from data secured by it. The city census in Paris, Vienna and Budapest is also conducted, and its results prepared and published by the statistical office of the cities named.

The character of the municipal statistical service of Berlin is well indicated by the following analysis of the contents of the "Statistical Year Book of the City of Berlin. 20th year. Statistics for 1893. Published, for the Magistracy, by R. Böckh, Director of the Statistical Office of the City of Berlin: 1895. pp. 490."

The main headings and sub-titles under I. are:

I.—*Population.*

1. State of the population. (a) Census of Dec. 1, 1890; (b) Movement of population.

2. Marriages. (a) By years since 1884, etc. Bans 1884–93. Marriages by calendar months 1891–93. The same by "offices of record" (*Standesämtern*); (b) Bans and marriages according to residence of contracting parties; (c) Marriages according to family status; (d) Contracting parties by age-classes, etc. Computed nubility. Marriages by respective ages, age difference, and kinship; (e) Duration of unmarried state of remarried, combined with age-classes. Reunion of separated; (f) Marriages by occupation of contracting parties; (g) Marriages by birthplace of contracting parties (marriages, and of brides born in Berlin, with grooms born elsewhere, in six classes by occuation, showing year of age); (h) Marriages according to religion of contracting parties.

3. Dissolutions of marriage. (a) Dissolutions of marriage in general, 1884–89 by years. Computed duration of married state; (b) Dissolution of marriage by death of husband, of wife, by age-classes, and duration of married state, etc.; (c) Divorces, variously and minutely classified. Appendix. Relative frequency of divorces in twenty-three countries and seven great cities in the period 1881–90, or 1877–86.

4. Births. (a) Legitimate and illegitimate, by years, months, and offices of record; (b) Multiple births; (c) Still births, legitimate and illegitimate, 1884–93, by months, and offices of record; (d) Living births, classified according to age of mother, etc., etc.; (e) Legitimate children, classified according to the fruitfulness of the marriage etc.; (f) Legitimate male and female births, according to age, differences of parents, etc.; (g) Births according to occupation of parents; (h) Births according to religion of parents. Fruitfulness-coefficients of marriages according to religion.

5. Legitimations of illegitimate children, 1884–93, variously classified.

6. Deaths. (a) Classified according to time and place. 1. For years 1884–93; deaths by calendar months, of adults and young children, etc. 2. By offices of record in general and by mortality rates of children in particular; deaths in hospitals; mortality rates by wards, 1890–91. 3. According to the story of residence of decedents, 1884–93. (b) Mortality according to age and family condition. 1. Mortality of children by days, months, quarters and years, with distinction between legitimate and illegitimate children. Mortality table of legitimate, illegitimate and of all children (first year of life) in 1893. 2. Decedents by age and civil status. Berlin mortality tables and the method

of computing them. Mortality table of males and females for 1888 and 1889. Duration of life, 1876–89. Use of Berlin mortality tables. (c) Mortality according to cause of death. 1. In general, according to Virchow's nomenclature. 2. Seventeen selected causes of death by calendar months. The same according to thirteen kinds of violent death and specified suicides. 3. Selected causes of death according to location of residence, or dwelling. 4. Mortality according to cause of death and age. Tables, methodical computation of mortality by cause of death. Influence of causes of death in thirty-three groups on the mortality of the population of Berlin (male and female), in 22 age-classes for 1888. Influence of the same causes of death for years 1877–88. Mortality co-efficients of various age-classes, 1893, for ten selected causes of death. 5. Mortality of legitimate and illegitimate children from sixteen causes of death (grouped), combined with age (year and month of age). The same, in terms of mortality table, of legitimate and illegitimate children. 6. Cases of death from abdominal typhus and diphtheria, according to duration of illness by age-classes. (d) Reported cases of ten infectious diseases. 1. Cases of illness and death by calendar months. 2. Cases of sickness by age-classes, and sex. 3. The same according to location of dwelling. 4. Cases of sickness and death by offices of record. 5. The same according to size of family and number in dwelling. (e) Mortality of children according to form of nourishment given them. 1. Deaths of children classified according to nourishment. (*e. g.*) Mother's milk, animal's milk, artificial food, etc., by calendar months, particularly as regards illegitimate children. 2. According to kind of nourishment and month of life, etc. 3. Deaths of children by kind of nourishment and cause of death. (a) In general. Proportion of breast-fed children among decedents by causes of death. (b) According to kind of nourishment by cause of death and single months of life. Comparison of mortality coefficients of specified cause according to kind of nourishment and month of life. (c) Deaths from diseases of digestive organs by kind of nourishment, month of life, and season of the year. (d) By cause of death, month of life, and legitimacy. (f) Deaths classified according to birthplace and age-class. (g) Deaths according to occupation of decedents. (h) Deaths according to religion of decedents.

7. Local Movement of Population. (a) Migration to and from Berlin, 1884–1893. 1. By calendar months. 2. By age-classes. 3. By family condition and age-classes. 4. Of persons born in Berlin and elsewhere. 5. By classified occupations. 6. Movement of strangers in the city. 7. (b) Change of domicile by years and calendar months. Appendix. Factors in the movement of population in communes adjacent to Berlin. 1. Charlottenberg. Change in population since the census. Deaths by causes of death, with distinction of age of children and those above 60 years. Births and legitimations in the same. 2. Births and deaths in 18 localities in the neighborhood of Berlin, with distinction in respect to children under one year old; and also regarding 11 selected causes of death, gathered from the announcements of the Imperial Health Office. Comparison with Berlin.

II. Natural Conditions, *i. e.*, in respect to temperature, barometric pressure, direction of wind, precipitation, etc. Seven sub-heads.

III. Land and Buildings. Six sub-heads.

IV. Public Care of Streets and Buildings. Seven sub-heads.

V. Industrial Conditions and Wages. Eight sub-heads.

VI. Prices. Consumption of Food Material. Traffic. Eight sub-heads. *e. g.*, 3. Goods-traffic on Railroads and Canals. (a) Wares imported and exported on rail-

ways according to statistics of goods moved. (b) Amount entered and remaining within the city, of coal and coke, by railways and canals, as reported by the Royal Railway Directory. (c) Traffic by water of goods carried through, brought in, or carried away; and (d) Passenger traffic on city and belt-railways, tickets issued in city, city-ring, suburban, and "distance traffic" by months and stations.

VII. Insurance matters and institutes for self-help. Twelve sub-heads.

VIII. Affairs of the poor. Benevolence and care of sick. Four sub-heads.

IX. Police, justice, prisons. Seven sub-heads.

X. Institutions and associations for instruction and culture. Nine sub-heads.

XI. Religious associations. Four sub-heads.

XII. Public burdens and dues. Seven sub-heads; *e. g.*, F. Housekeeping and possessions of the city. (a) Summary of receipts and expenditures of the central city treasury, from 1892–93, and from 1893–94. (b) Receipts and expenditures of the treasurer of special departments of public works, viz.: gas works, water works, sewerage works, central cattle market, central slaughter-house, meat inspection, management of market halls. summary. (c) City debt and city assets.

VIENNA DEPARTMENT OF STATISTICS.

The municipal statistics of Vienna are gathered, treated and published by the Statistical Department of the Vienna Magistracy, the head of which, Dr. S. Sedlaczek, is a member of the magistracy, and is entitled *magisträtsrath* or magistral councillor. The work of this department is in general similar to that of the statistical bureaus or offices of Budapest, Paris, Berlin, and other German cities. The department has issued monthly statistical reports since 1874. The principal publication of the Vienna statistical department is a statistical year-book. The latest number published bears the date of 1895; it relates to the statistics for the year 1893, and constitutes the eleventh number in the series. The Statistical Year-Book for 1893 comprises 731 pages, arranged under the following general rubrics:

I. Meteorological conditions, pp. 2–4. II. Height of water, pp. 6–8, *i. e.*, (a) In the Danube; b) Ground water. III. Extent of the municipal territory, 8–10. IV. Statistics of buildings and dwellings, 11–29. V. State of the population, 30. VI. Movement of population, 32–78. VII. Elections, 79–83. VII. Personnel and business transactions of the municipal administration, 86–101. IX. Economic conditions of the municipality, 104–158. X. Taxes and royal prerogatives, 160–190. XI. Military affairs, 192–206. XII. Administration of justice and public security, 208–255. XIII. Religious affairs, 258–267. XIV. Educational affairs, 270–360. XV. Public health, 362–414. XVI. Matters relating to means of subsistence, 416–446. XVII. Industry and industrial affairs, 448–537. XVIII. Savings banks and pawn establishments, 540–552. XIX. Public traffic, 554–602. XX. Associations, 604–614. XXI. Care of the poor, 616–681. Index, 688–730.

The Vienna statistics in respect to buildings and dwellings are, like the statistics contained in the publications of the Berlin and Budapest bureaus, full and detailed. So also are the statistics relating to the movement of population and to educational affairs.*

The Municipal Statistical Bureau of Budapest.

This bureau was organized in 1869. Its organization was determined upon because of the census ordered to be taken following the restoration of the Hungarian Constitution. Mr. Joseph Körösi was chosen director of the bureau, and has continued in that capacity to the present time. He was elected for life.

In 1870, a statistical commission was appointed, consisting of twenty-two members, including the director of the bureau. The commission appears to have fallen soon into desuetude. After the census of population was completed in 1870, Director Körösi's plan for conducting the special business of the bureau was adopted by the city council and the magistracy, and he was empowered to secure the requisite data from various offices and institutions, the city to prepare the necessary formularies for the required reports. The following subjects of inquiry were authorized:

Matters of finance, revenue, taxes and rates, city property, rental of houses, lighting, poor affairs, pavements, military recruiting, common school affairs, police affairs, moral statistics, births, deaths, marriages, consumption of provisions, statistics of prices, trade and traffic, exchange, banking institutions, insurance affairs, local traffic, post and telegraph affairs, newspapers, public libraries, theatres, meteorology, building operations, statistic of dwellings, vaccination, water supply, forestry, public vehicles, morbidity statistics.

The bureau was given jurisdiction over the entire city when Buda was united to Pest. The general field of activity of the bureau was defined in the act organizing it, as follows: "The duty of the statistical bureau is the observation and regular exposition of the salient phenomena in the communal and social life

* For a detailed statement of the sub heads under the general head of educational affairs see p. 16 of Dr. Hartwell's report to Mayor Quincy, Boston City Document No. 94, 1897.

of the city, in order to aid the administration of the city, and to afford information, so far as it can be given statistically, concerning the interests of the capital." The director has the rank of a magisterial councillor, and is a member of the representative chamber of the city. He edits the publications of the bureau, and is alone responsible for them. The act provided for four official positions—a special assistant, two subordinate assistants, and a technical assistant. It provided for the publication of a weekly report and for monthly and quarterly summaries, also for a year-book, and for further independent publications on special subjects.

The bureau seems to have been understaffed, as the year-book, which was provided for by the original act constituting the bureau, appeared for the first time in 1873, between which date and the publication of the year-book, No. 1 in the new series, in 1896, the publication was suspended.

The statistical bureau of Budapest employs the card catalogue method in all its larger operations. The principal subjects treated according to this method are: Mortality statistics, legitimate births, infectious diseases, marriages, vacant dwellings, the opening and termination of business undertakings, public instruction, etc.

Experience has shown that by means of this method the work is simplified, and is quickly and easily carried out; and that much more diversified use of the material is made possible through its adoption.

The extent of current work may be gathered from the number of notifications received in 1894: Weekly returns, 122; for the entire year, 6,344; monthly returns, 249; for the entire year, 2,988; annual returns, 283. In addition to this, the card catalogue material is as follows: Birth bulletins, 12,000; death bulletins, 15,000; bulletins relating to still-born, 2,000; building licenses, 2,000; statistical returns concerning buildings, 1,000; public school bulletins, 40,000; industrial school bulletins, 8,000; returns concerning vacant residences, 8,000. In 1894 about 98,000 notifications requiring to be worked over were received, or about twice as many as in the year 1883.

The collection of data by the bureau is conducted in accordance

with strictly drawn up instructions, especially prepared for the purpose. Such instructions exist for the following branches of municipal statistics: (1) Statistics of mortality; (2) of building operations; (3) income tax; (4) of instruction; (5) enumeration of school children; (6) statistics of financial institutions and stock companies; (7) natality statistics.

In addition to the ordinary matters of registration, the following books are regularly kept in the bureau:

1. A register of births (including weekly registration by wards, as to religion, sex and legitimacy).

2. A register of marriages, *i. e.*, monthly registration by wards, age, civil position and religion.

3. Register of births and marriages, annual summary.

4. A register of deaths, including: (a) Weekly registration according to sex; (b) Monthly registration of deaths, classified according to the day of death, sex, age, civil condition and religion of the decedents; (c) Yearly registration of deaths by age and occupation of decedents; (d) Yearly registration of deaths by age, sex, situation of dwelling.

5. Register of railroad and shipping traffic, including: (a) Weekly register for the grain trade; (b) Monthly register of grain, freight and passenger traffic; (c) Register of market prices.

6. Register of banks, including monthly registration of deposit accounts, loans, cash on hand, and condition at end of month.

It is the business of the bureau to furnish information to the public concerning all of the matters which fall within its jurisdiction; therefore, to this end, all publications of the statistical bureau on the day of their appearance are sent to the daily and special journals in order that they may give the material wider publicity. Special information is also furnished at a fixed official tariff for cost. Information on questions submitted by the magistracy, or where the representatives of the city government are concerned, are, naturally, furnished without special charge.

The budget of the Bureau in 1894 was: Expenses for the personnel, two places being vacant, 8,000 florins; printing, 3,000; office expenses, 3,000; library, 250; total, 14,250 florins. (The florin is about 40 cents.) Since the first of January, 1872, the chief work of the Bureau has been the systematic collection of statistical data of the most diversified character. The regular publications of the collected material have continued from the beginning of 1873 in the form of "Weekly Bulletins" and the

"Monthly Summaries." Both of these publications have already reached their twenty-fourth year. They are published only in the Hungarian language. The monthly summaries, however, until the end of 1893, contained extracts in French; and since the beginning of 1894 the tabulated material has contained notes in German.

PUBLICATIONS OF THE BUDAPEST STATISTICAL BUREAU.

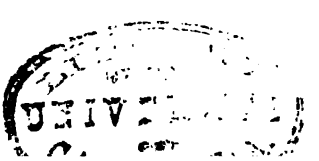
1. *Weekly Bulletins*, which appear every Thursday in folio form, contain information under the following heads:

(a) Movement of population: living births by sex, legitimacy and religion; still births by sex and legitimacy; deaths by sex, age-classes, legitimacy and wards; the principal causes of death; (b) Morbidity: The number of cases in public hospitals; infectious diseases, classified by city wards; (c) Market traffic: Traffic and prices upon the produce exchange; cattle market and prices; horse market; (d) Freight traffic: Export and import movement of principal wares, with specifications as to business houses.

2. *Monthly Summaries* include from two to four signatures. They constitute a regular monthly report, with independent articles relating to different phases of municipal life. The regular monthly report contains:

(a) Movement of population: Mortality by days, wards, sex, age, religion, civil condition; principal causes of death; infectious diseases; births, according to sex, legitimacy, religion; still-born by religion; miscarriages; marriages by religion and civil condition; births and mortality in twenty-nine Hungarian and seven foreign cities. (Extract out of the weekly bulletin of International Statistics—"*Bulletin Hebdomadaire de Statistique Internationale.*") (b) Meteorological observations, by days. (c) Traffic in goods: The inward and outward movement of forty-one principal articles; Danube traffic, and goods traffic through the customs lines; (d) Grain trade and prices; (e) Traffic of the entrepots and elevators, analyzed with respect to 27 kinds of wares. (f) Financial institutions: Condition of deposits, exchange, pawn shops; and loan and cash balances by individual institutions. (g) Sundry matters: Passenger traffic on railroads and boats; business of pawn offices; business of the tax offices; consumption of water; height of water in the Danube; use of municipal baths; free baths on Danube; market prices of 218 articles of consumption; market receipts; horse market; local passenger traffic; receipts in local passenger traffic; current prices of thirty-four stocks; attendance on public libraries and the national museum; building licenses; work of the voluntary society for aid in emergencies; work of the disinfection institute; the number of strangers entertained in the hotels; fires; polyclinic for lying-in cases; graphical tables concerning the deaths from infectious diseases.

The independent articles in the monthly publications summarize statistical information for an entire year, and at times afford comparisons of an international nature. Such summaries appear



regularly concerning living births, still births and miscarriages, marriages, mortality, infectious diseases, hygienic work of the municipality, passenger traffic on railroads and boats, local traffic, strangers in the city, freight traffic, traffic in grain on the exchange, building operations, vacant residences, the milling industry, financial institutions, stock companies, opening of new business concerns, intermediate schools, common school affairs, compulsory school attendance, cattle trade, horse market, slaughterhouse, city baths, free baths, tax affairs (direct taxes, taxes on articles consumed, taxes on rents, tax executions), consumption of provisions, consumption of water, pawn shops, disinfection institute, etc.

3. *Periodical publications.* Beside the regular publications of the Bureau, from time to time larger independent works are issued relating to the principal branches of municipal life. In this series of publications (amounting to twenty-five volumes in 1894) have appeared the census and conscription of population, 1857 to 1869, 1881 to 1886, 1891, seven publications; building operations from 1870 to 1894, four volumes; school affairs, 1871 to 1888, five volumes; mortality from 1872 to 1885, four volumes; infectious diseases, 1881 to 1892, one volume; studies in relation to tax affairs, 1870 to 1874, three volumes; Statistical Year Book, 1873, one volume, and Statistical Year Book No. 1, second series, 1896.

4. *International Publications*, concerning movement of population and financial statistics concerning the principal cities in Europe, and a few cities in the United States. From 1877 to 1886 Mr. Körösi edited "*Bulletin Annuel des Finances des Grandes Villes*," and has issued the "*Bulletin Hebdomadaire de Statistique Internationale*" since 1878. The editions of the publications of the bureau are as follows: Of the weekly bulletins, 450 copies; monthly reports, 800 copies; International bulletin, 450 copies; of publications in Hungarian, 800 copies, and in German, 600 copies.

The total number of separate publications issued by the bureau, 1870 to 1894, numbered 131.

The library of the bureau was established in 1870. The magistracy voted 400 gulden for it, then, until 1873, 150 gulden annu-

ally, and from 1874 on, yearly, 250 gulden for its increase. From such a scanty appropriation it would never have been possible for the bureau to become the possessor of a half-way necessary technical library; but the most valuable part of the library has been secured through the exchange of publications of the statistical bureau with kindred institutions elsewhere. In 1877 the library included 2,207 works, numbering 3,711 volumes; in 1894 it contained 6,074 works, numbering 14,790 volumes. The books in the library relate to most matters which are made the subject of statistical investigation and include a great number of special works in the principal civilized languages. Access to the library is allowed to specialists, and to the representatives and officers of the city government.

The monthly bulletins are received by the city councillors, the magistracy, and other city officials, the principal daily journals, the statistical bureaus of numerous countries and large cities, the directors of the railroads entering Budapest and the Danube Steamship Company.

The weekly bulletins and their supplements are sent to all the principal daily journals, to representatives of the city government who desire them, to such statistical bureaus as publish weekly bulletins, the statistical bureau of the State, the city magistracy, the city health department and a number of Hungarian and foreign cities.

The organization of the bureau on the first of September, 1894, was as follows: Director, salary and allowances, 3,300 florins; vice-director, salary and allowances, 2,100 florins; technical assistant, place unfilled, 1,500 florins; three ordinary assistants, respectively, 1,100, 1,000 and 800 florins, third place unfilled; scientific assistant, 912 florins; clerk, 547 florins; clerk, 730 florins; office servant, 540 florins.

Dr. Albert Shaw, in his "Municipal Government in Europe," characterizes the establishment of the Budapest Bureau of Statistics, as "one of the most fortunate features of the municipal reorganization that followed Hungary's assumption of home rule," and goes on to say, "the social and sanitary reforms of Budapest have followed the lines laid down by the statistical bureau. Until Mr. Körösi's work began the mortality of Budapest was not known. Its citizens thought it an extremely healthy place. The

statistical office was denounced as slandering and injuring the city when it first discovered and published the facts. But Mr. Körösi persevered, and his remarkable census of 1871 attempted to account for the high mortality. He made a thorough study of the condition of the population, and found overcrowding very prevalent, and, worst of all, a very large element of the population in damp, underground residences; then followed a series of regulations to prevent these evils. Living in cellars was forbidden, and new quarters for the poor were constructed * * * as a result of the various efforts to improve the health and social condition of the people, put forth intelligently and humanely by the public authorities, Budapest is fast exchanging its Oriental unwholesomeness for the comparative healthfulness of an occidental city. Meanwhile, Mr. Körösi's elaborate statistical analyses throw light from time to time upon every doubtful point, and his unequalled library of inter-municipal statistics enables him to furnish his constituency with stimulating comparative data."

Few cities in the world have achieved such striking success in reducing their death-rate as has Budapest since 1870. Pest, in that year, had a population of 200,476, and a death-rate of 43.1 per thousand living. In December, 1895, Budapest had a population of 580,169, including 14,147 soldiers, and a death-rate of 24.6 per thousand of all inhabitants, or of 22.6 per thousand leaving strangers out of account. Not only have Körösi's studies and recommendations in regard to sanitation and municipal housekeeping borne fruit in better housing of the poor, purer water supply and a diminished death-rate, but the influence of the statistical bureau is traceable, also, in reforms relating to elections, the management of public instruction and of taxation, and in improved commercial conditions.

The "*Statistical Year Book of the Capital and Residence City Budapest*, the first year, 1894, with a survey from the year 1874 to 1893, edited and prepared by Professor Dr. Gustav Thirring, Vice-Director of the Municipal Statistical Bureau, member of the Statistical Council, published by the Statistical Bureau of the Capital and Residence City Budapest, price 4 gulden, Budapest and Berlin, 1896," is a model of its kind.

The table of contents includes seventeen principal rubrics,

covering 331 pages of text, and nine pages of indexes. The work is published in Hungarian, with German equivalents for the principal and detailed rubrics. The principal rubics are as follows :

I. Physical conditions. II. Topographical conditions. III. Buildings and conditions relating to dwellings. IV. Standing population. V. Movement of population. VI. Sanitary affairs. VII. Production (products of the soil); conditions relating to ownership. VIII. Industry; trade; goods traffic. IX. Affairs relating to means of communication. X. Financial matters. XI Building operations. XII. Provisions and markets. XIII. Matters relating to intellectual culture. XIV. Charities. XV. Public security; protection from fire. XVI. Taxes. XVII. Municipal Household.*

STOCKHOLM'S MUNICIPAL STATISTICS.

The city government of Stockholm publishes a digest of the statistics of the various departments concerned in city housekeeping. The character of the publication is indicated by the following description of the report of Stockholm's municipal government for the year 1894. The volume in question, published in 1896, is the 27th of its series and is practically a statistical year book. It comprises 490 pages, 8vo., of which 463 are devoted to statistical tables. It includes also an introduction, numbering 135 pages, by way of report of the year's activity in the different departments of administration. The statistical material is included under the following general rubrics :

I. Superficial area of the city, electoral districts. Tables 1–3. II. Meteorology; temperature. Tables 4–6. III. Population; public health; mortality. Tables 7–29. IV. Schools; museums; libraries. Tables 30–39. V. Elections. Tables 40–43. VI. Courts and police; fires; "police of morals"; prisons. Tables 44–60. VII. Savings banks; pawnbroking establishments. Tables 61–67. VIII. Commerce; wholesale and retail industry; building operations; records of conveyance of property; vacant residences; mortgages; actions for debt; traffic; circulation; navigation; height of water. Tables 68–112. IX. Traffic in ardent spirits. Tables 113–118. X. Taxes. Tables 119–126, XI. Buildings; bridges; quays and ports of the city. Tables 127–130. XII. Cost of laying out, extension and repair of streets; Tables 131–140. XIII. Streets and sewers. Tables 141–149. XIV. Lighting; manufacture of gas. Tables 150–151. XV. Water service. Tables 152–156. XVI. Sanitation and public hygiene. Tables 157–164. XVII. Medical service and public health. Tables 165–176. XVIII. Public assistance, Tables 177–195. XIX. Finance. Tables 196–214. XX. Index; pages 464–490.

The population statistics may be taken as an illustration of the fulness of detail contained in the statistical analyses in

*For a detailed statement of the sub-headings contained under General Rubrics III., IV., VI., VIII., XI. and XVII., see Dr. Hartwell's report to Mayor Quincy, Boston City Document, No. 94; 1897.

many of the tables included in this work. For instance: Table 7 shows the number of male and female inhabitants in Stockholm, analyzed with respect to civil status, in each of the census years from 1800 to 1880, and by single years from 1880 to 1894. The census years were 1800, 1805, 1810, etc.

Table 8 contains a classification of the population of Stockholm on December 31, 1890, according to occupation, principals in business or employees, assistants and laborers.

Other tables show the distribution of population in the various districts or wards of the city. Table 10 shows the population of the several principal wards of the city by single years from 1865 to 1894, inclusive. Table 11 shows the population in the smaller districts of the city, nineteen in number, at the beginning of the year 1894, with the increase of population in each ward from births and immigrants, and also the diminution of population in each ward through death and emigration from the ward, with summary statements under the headings just given for the years 1890 to 1894, inclusive. Table 13 shows the number of emigrants from the city, classified according to sex, and also by the countries to which they migrated, for the years 1890 to 1894 inclusive.

The mortality statistics of Stockholm are worthy of notice. Table 14, for instance, shows the number of deaths from the most important infectious diseases, classified according to the calendar months of decease, for the years 1886 to 1894, inclusive. Table 15 is a summary table, showing the absolute and percentage number of births and deaths to the number living, classified by civil status and sex, for the census years 1800 to 1885, and by single years from 1885 to 1894. Table 21 shows the number of deaths in the principal districts of the city—the military barracks, foundling hospital, etc.—for each of the calendar months, quarters and years, in 1890 to 1894, inclusive.

In general, it may be said that the population and mortality statistics in the Stockholm Year-Book are more instructive and intelligible than the population and vital statistics as commonly published in this country, by reason of the fact that percentages are given in addition to absolute numbers, under the different rubrics and sub-heads. Table 25 is of particular interest, because it gives the number of deaths from alcoholism and insanity, clas-

sified according to civil and military hospitals and residence at home for each of the years from 1870 to 1894, inclusive. In this table absolute numbers of cases admitted and percentage of deaths are given. Table 29 is of interest, as showing the number and kind of baths taken in various bathing establishments of the city for the years 1885–94.

The tables concerning school attendance in the common schools of the city are remarkable for their fulness of detail. Table 36, for instance, shows the distribution of pupils by districts according to classes, and according to the subjects of instruction. They also show what is rare in school statistics—the percentage amount of time lost in the schools of the several districts by reason of illness, as well as from excused and unexcused absence.

The industrial statistics show the number of mechanics and laborers engaged in different branches of industry classified according to sex for the decade 1890–94. The statistics of manufactures for the same period are also models of statistical summarization. The statistics relating to occupied and unoccupied dwellings are very comprehensive. Analyses by wards and precincts of the statistics of passenger and freight traffic by land and water are also given. The tables relating to the city's finances are remarkable for their number, variety and comprehensiveness, and also for their lucidity.

General Remarks.

Municipal statistics are more comprehensive, various and scientifically presented on the continent of Europe than is the case in Great Britain or the United States. The continental municipal statistical offices present certain characteristics, as a class, that are significant and noteworthy. (1) They are comparatively independent and self-contained; (2) they are more closely connected with the executive and administrative departments of the city government than with any other; (3) they are organized as permanent scientific bureaus, under the responsible charge of highly trained specialists, who, by reason of their character, ability, and standing, command the respect of their colleagues and of the public; (4) their jurisdiction is so well defined, and their work so systematized, that they accomplish a great amount of routine work and of independent research with a compara-

tively small staff of subordinate assistants and clerks; (5) their publications, being models in respect to comprehensiveness, conciseness and trustworthiness, are of more than local value, and are serviceable for the purposes of the comparative student of municipal life and development, be he sanitarian, politician, economist or sociologist.

The statistical offices of the leading German cities are so well organized that, through the co-operation of their directors, there is now published a "Statistical Year-Book of German Cities," which was established in 1891. This work contains a valuable series of comparative tables upon certain standard subjects of statistical inquiry, such as are contained in the statistical year-books whose rubrics I have enumerated; and from time to time special studies of a statistical nature are contained in this year-book.

So far as I am aware, it would be extremely difficult, under present conditions, to publish a similar work for American cities;* yet, both in the case of British and American cities, the public documents published by the various departments and bureaus of their respective governments, contain a great deal of statistical matter. But statistical information concerning the various departments of city activity and housekeeping is now so scattered in the publications of our American municipalities that its value is materially diminished. It is manifestly in the interest of public policy that well-digested statistical tables, both of detailed and summary nature, should be prepared by competent hands, and set forth in compact, convenient form for the information of city officials and the electorate.

The establishment by American cities of a statistical bureau, which should serve each city as a clearing-house for the statistics of its several departments, would conduce greatly to an intelligent interest on the part of the citizens-at-large in public affairs, and would also facilitate what is greatly needed—the dissemination of accurate official statistical reports for the benefit of students of municipal and economic affairs. At present, persons who desire complete information concerning city finances, school

* As to British cities, see foot-note, p. 529. A valuable year-book has just been issued, entitled "The Municipal Year-Book of the United Kingdom for 1897," by Robert Donald.

affairs, vital statistics, etc., etc., for a period of years, are obliged to search in a grat variety of documents for the data necessary to afford a comparative view of the development of municipal housekeeping.

It is especially noteworthy that the population statistics gathered and published by the municipal statistical offices on the continent are valuable and complete; much more so than is commonly the case with such statistics in this country. The fact that the census of cities like Berlin, Paris, Budapest, etc., are prepared by their respective municipal statistical offices under the direction of permanent and highly trained officials, adds largely to their value. It is also noteworthy that statistics regarding movement of the population and the public health are much fuller, more detailed and valuable than those commonly published in this country. Not only are the vital statistics fuller and more completely analyzed, but statistics regarding persons suffering from different forms of disease are more comprehensive than those usually found in the public documents which issue from American city offices. This is partly due to the more complete system of civil registration which obtains in all continental cities, but it appears to be also largely due to the fact that officials and the public are more interested in receiving complete and regular information concerning the ravages of death and the condition of the public health. The weekly, monthly and quarterly publications of most continental statistical offices present remarkably full and well-digested statements concerning morbidity as well as mortality statistics. The value of such statistics as a means of judging the condition of the environment of municipal population can hardly be over-estimated. Reforms of far-reaching and permanent value have been instituted in several instances as a result of the mortality and morbidity statistics published by municipal statistical offices. The showing of the statistical bureau of Budapest, for instance, with regard to the amount of illness and death in low and ill-ventilated dwellings, has had a marked influence in causing reform and improvement in the building laws of that city. The studies of Director Böckh, of the Berlin Statistical Office, with regard to the comparative mortality of infants fed upon different articles of food, are extremely interesting, and of great scientific value.

It is possible for a well-conducted municipal statistical office to render most valuable assistance to the heads of all departments of city affairs, as well as to enable the chief magistrates of cities to acquire ready and accurate information upon a great number of subjects of vital importance. A catalogue of the special independent studies, published separately from the regular publications of the statistical offices, which I have considered, would indicate the helpful character of such offices in acquiring and spreading information of a special character upon subjects which are usually left with us to private students.

In their aims, organization and achievements, the leading municipal statistical offices on the continent of Europe betoken a more highly developed state of municipal life and organization than has yet been attained elsewhere. In the sphere of municipal administration such offices serve much the same purpose as does the "headquarters staff" in the administration of modern military affairs. That is to say, being organized as "intelligence departments," they furnish the executive department of the city government with such information as it requires for devising and conducting its plan of campaign against ignorance, disease, crime, pauperism and extravagance. Through their publications, such offices are also capable of rendering important aid to the electorate in arriving at intelligent conclusions as to the degree of fidelity and efficiency shown by its public servants in the discharge of their duties.

Experience has shown that city statistical offices, such as are described in the foregoing pages, constitute an important and effectual aid to the intelligent, practical and economical conduct of municipal business and housekeeping. The establishment by Boston and other great cities of the United States of similar offices could hardly fail to conduce to better government and a more enlightened public spirit, provided the teachings of the best European experience in this field were clearly apprehended and consistently applied in their organization and management.

THE PARIS GAS WORKS.*

To the Editor of MUNICIPAL AFFAIRS:

My Dear Sir.—In the last number of your admirable quarterly there occurs a paragraph which I very much regret the necessity of being obliged to correct, in some part for the sake of my own reputation, and also as an obvious duty to the publishers of my books on European municipal government. The paragraph to which I refer occurs in the article contributed by Mr. Allen Ripley Foote as an answer to Mr. Edward M. Grout's argument in favor of the municipal operation of gas plants. Mr. Grout, accepting as reliable certain data that he has found in my chapter on Paris, proceeds to draw certain inferences and conclusions of his own, which would aid his argument in favor of municipal gas supplies. With Mr. Grout's inferences and conclusions I have no concern, and I should certainly have found no cause of offense in anything that Mr. Foote, in his reply to Mr. Grout, might have said by way of refutation of such inferences or arguments. But when Mr. Foote proceeds to make an attack upon my statements, which would seem at once to accuse me of inaccuracy and of an intentional perversion or suppression of the truth, I must, of course, ask for a little space in which to protect myself. Mr. Foote's remarks are as follows:

"Some years ago Dr. Shaw published an article in the *Century Magazine* under the title of 'Paris a Model Municipality.' In that article he attempted to give a statistical analysis of the accounts of the Paris Gas Company, and made certain deductions which he recommended to the earnest consideration of American readers. Noticing that he had made a slight error of about $40,000,000 at the outset of his calculations, which detracted somewhat from the value of his deductions, I wrote an article under the title of 'A Plea for Truth in Statistical Literature,' to correct Dr. Shaw's errors, in which I gave a complete analysis of an annual report of the Paris Gas Company, and offered it to the *Century Magazine*, hoping to neutralize the miseducation Dr. Shaw's article was disseminating. My article was rejected. The truth being suppressed, the error has been perpetuated, and is reproduced in the paper I have under examination. I will now make another attempt to correct the error."

When one man accuses another of serious error in the leisurely pages of a dignified quarterly periodical, he would do well to cultivate accuracy on his own account. The article to which Mr. Foote refers was entitled "Paris: The Typical Modern City." He cites it as "Paris a Model Municipality" To his mind I suppose that this misquotation would seem trivial. To my mind there is a vast difference between calling a town typically modern and calling it a municipal model. I have never anywhere treated of Paris as a municipal model,—but probably Mr. Foote would see no difference.

Mr. Foote's next assertion is that I attempted to give a statistical analysis of the accounts of the Paris Gas Company. On the contrary, there is not a single line in my article which attempts either a statistical analysis or any other sort of an analysis of the accounts of the Paris Gas Company. What I did do was to give an explanation of the arrangement by which the city of Paris obtains for the municipal treasury one-half of all profits accruing after the company has earned for its shareholders a dividend of thirteen and one-third per cent. on an agreed share capital of 84,000,000 francs. I have looked carefully over my article after reading Mr. Foote's accusations, and I do

* The above letter from Dr. Shaw is self-explanatory. The paragraph referred to occurs on page 270 of the June number of MUNICIPAL AFFAIRS.—[Editor's Note.]

not find a word in my account of that arrangement between the city of Paris and the gas company that was either inaccurate or misleading. My information had been obtained with care, and I had in my hands the legal contract itself, and all laws relating to it. I am somewhat amused, by the way, to note that Mr. Foote cites as the sole source of his superior information some figures that he had seen in a newspaper, namely, a copy of the *Journal of Gas Lighting and Water Supply* printed in London.

In justice to Mr. Foote, it is to be said that he may have supposed he had really found an error. If so, his confusion can easily be explained. The city of Paris has expanded greatly since the gas company obtained its present franchise arrangements some twenty-seven years ago. The company has, of course enlarged its plant and extended the sphere of its operations, and this has meant the profitable use of a great deal more money. It has obtained this money by borrowing on issues of its own bonds. It is using about three times as much borrowed capital as the face value of its fixed share capital, which by law remains at 84,000,000 francs. This borrowed money, being profitably employed, easily pays its own way. That is to say, it earns interest and provides for its own *amortissement*, and that is all there is to say about it. That borrowed money has nothing more to do with an explanation of the division of profits between the gas company and the municipality, than a statement of the company's annual coal bills would have, or its receipts from the sale of residual products. It is this borrowed money which the company is using in its business that constitutes what Mr. Foote calls "a slight error of $40,000,000 at the outset of his [my] calculations, which detracted somewhat from the value of his [my] deductions." But I was not making calculations; and the $40,000,000 more or less bore no possible relation to the matter that I was explaining. If I had been presenting a condensed balance sheet of the Paris Gas Company, I should assuredly have placed its liabilities over against its assets; but as I had no occasion to mention its assets, there was obviously no reason for bringing in its indebtedness to the holders of its *emprunts*.

I have great confidence in the intelligence and discernment of the editors of the *Century Magazine*. I can readily understand, therefore, why they rejected Mr. Allen Ripley Foote's article entitled "A Plea for Truth in Statistical Literature," designed by Mr. Foote to correct my errors. I do not remember that the editors of the *Century* at the time called my attention to Mr. Foote's manuscript; and I am sure they did not throw any of the responsibility for their suppression of truth upon me. My article in the *Century* was published more than six years ago. It is well known in England and in Paris. M. Leroy-Beaulieu has reviewed it at some length, and he and other French publicists intimately familiar with the facts, have commended my account of the municipal government of Paris for what they have been pleased to call its remarkable accuracy. I do not say this in self-praise, but in defense of the Century Company, which has published my articles in its magazine, and has shown confidence enough in me to publish two expensive volumes, in the belief that my writing was reasonably free from inaccuracies and misstatements, and wholly free from any desire or intention to present anything, either by statement or by inference, that should do violence to "truth in statistical literature."

I have no disposition to review Mr. Foote's article as a whole, or to point out its manifold sophistications. The only part of his long article with which I am personally concerned is that which is devoted to the Paris gas supply. I will, therefore, content

myself with ventilating just one more of his assertions. Mr. Foote's article contains the following statement; the italics being his:

"When the Paris contract expires, the 'franchise and plant' *will not revert to the city without compensation*, as many advocates of municipal ownership have represented."

Mr. Foote does not explain or qualify this remark in any way. He intends it as a direct reply to Mr. Grout, and apparently as an indirect attack upon my article. Referring to my own article, I find the following sentence, which comprises all that I said upon the subject:

Finally, at the expiration of the charter, all rights revert to the city, which becomes also the owner of all the subways, piping, etc., that pertain to the plant.

I still remain entirely satisfied with the accuracy of this sentence. But let me dispose of the matter finally by quoting article 51 of chapter 8 of the agreement between the city of Paris and the gas company:

Art. 51.—Asl 'expiration de ladite concession, la ville de Paris deviendra propriétaire de plein droit, et entrera de suite en possession des tuyaux, robinets, siphons, regards, valves, et généralement de tout le matériel qui existera sous les voies publiques.

This citation from the *Décret* and *Traité* of 1870, covers the case. I need not analyze Mr. Foote's assertion in order to show the intelligent reader its disingenuousness. Either Mr. Foote must confess ignorance, or else he must admit that his sentence was intended to convey a totally wrong impression. I am sorry to find that this same uncandid and misleading method impairs at many points Mr. Allen Ripley Foote's elaborate article of forty-five pages.

I am very truly yours,

ALBERT SHAW.

BOOK REVIEWS.

Art and Life, and the Building and Decoration of Cities: A series of Lectures by Members of the Arts and Crafts Exhibition Society, delivered at the Fifth Exhibition of the Society in 1896. 8 vo., pp. 260. London: Rivington, Percival & Co., 1897. $1.50.

This book is a collection of five addresses, which, from the concordance of themes and the harmony of styles of treatment, might be taken for the work of one mind. They are, indeed, the result of one spirit, that of Ruskin, whose disciple each lecturer reveals himself in every ethical position and artistic attitude assumed.

The first address, "Of Art and Life," by T. J. Cobden-Sanderson, presents the general principles upon which the more specific propositions of the others are founded. Examples of these are: "The future of art is the setting in order the house of mankind in *exalted consciousness of its environment.*" "Art is doing a right thing well, in the spirit of one who loves the just, the seemly, the beautiful."

Not content with broadly stating such principles as these, the lecturer also broadly applies them. He, unlike most men of the so-called artistic temperament, sees in commerce the chief field for the operation of art as he has conceived it. Not to speak of production and manufacture of "things of beauty and of use," but "their exchange and distribution, over land and sea, by road and by rail and by ship; the erection of houses, of cities, of harbors; the establishment of public places, of public buildings, in which to meet, to consult, and to celebrate the great functions of the world's commerce,"—what, he says, could offer "more opportunities for the creation of the fit, the seemly and the beautiful"?

And all this stupendous energy, which is Life, he includes, in its entirety and its detail, within the province of Art, and the immediate end of art he presents in figure very close to reality, to be "the creation of the City Beautiful."

Mr. W. R. Lethaby, in the succeeding lecture "Of Beautiful Cities," focusses this thought, and gives it practical value, by a most suggestive comparison of London with the beautiful cities of old, from Athens of the violet crown and hill-encircled Jerusalem, to fair Paris and that elder London whose inseparable attribute among the mediæval minstrels was the significant term of "lovely."

Of the ancient city he says: "Everywhere we find the dual city inhabited by gods and men. Everywhere it was conceived as a larger home for the citizen, a great open-air museum and picture gallery, shadowed by groves and surrounded by gardens. Everywhere the city was the scene of a dignified common life, where frequent processions wound along sacred ways and brought first fruits to the temples."

In his description of the mediæval city Mr. Lethaby further illustrates this direct relation of art and life. Instead of looking back with longing to a by-gone Golden Age, the people of mediæval times concerned themselves very closely with the present

They "knew very well that they liked sunlight on whitewashed walls, blue sky seen through traceried parapets, pinnacles appearing over trees, the twinkling of gilt vanes, sharp arches, long aisles, bright windows, and stories, which everywhere—

'In gold and azure over all
Depainted were upon the wall.'

"If a romance writer or illuminator wanted to describe or figure a castle of romance, he did not recall some mouldering ruin, but went and looked at the newest thing from which the scaffolding had hardly been struck."

Mr. Lethaby finds most naturally, therefore, the central principle of the Middle Ages not in feudalism or even in the church, but in the guild system. Good work was prized and good workmanship honored above everything. Accordingly, he would substitute the term "Guild-work" for the misleading phrase "Gothic Architecture." Of this work he takes as the most typical illustration the city of Paris, "the paradise of the world" as the author of *Philobiblon* calls it. Under the guiding inspiration of Victor Hugo, the lecturer presents a wide sweeping view of the ancient and noble city, stereopticon-clear to the imagination, and vibrant moreover with the rich energy of color and the joyous rhythm of life.

It is with even clearer vision and more loving delight that the lecturer describes mediæval London.

"London was, first of all, a city of leaded spires. The next thing to strike us, is the snowy whiteness of everything; the houses, churches, and even St. Paul's itself, are all whitewashed. * * * Recall to your minds some bright little fishing town or out-of-the-way village, for in regard to their whitewash these are still in the mediæval period, and Gothic London was much more like a great village than it was like the present fifty square miles of solid building and paving stones."

Mr. Lethaby thus comes to the modern London, and describes it not pessimistically, but always with the hope of restoration, if not to its original form, in the same spirit at least, which made it the early type of the City Beautiful.

As a means to begin this great reformation, he advises as the first practical step, the compilation of a series of historical maps and handbooks, like Hoffbauer's folios of Paris, showing the development of the city, step by step, from Roman days. In this manner, its organic nature would become manifest.

The second necessity is a negative one, to "get rid of the grandeur idea of Art." "We should," he says, "begin on the humblest plane by sweeping streets better, washing and whitewashing the houses" (he should here have added, "consuming the smoke"), "and taking care that such railings and lamp-posts as are required are good lamp-posts and railings, the work of the best artists attainable. Accordingly, Mr. Lethaby would not Haussmannise London, *i. e.* "grandify" it at a *coup*. New streets need be few, but should be laid in harmony with the natural formation and environment of London, which is at present, he says, "structureless as one of its own fogs."

"Finally," he says, and so returns to the organic idea of art, "a dividing off of London from non-London is essential. * * * I have heard it suggested that a zone" (of encircling parks), "is even now a possibility. Be this as it may, a new and better London can only be completed as old Rome was founded—by turning a plough trench round about it."

The third lecture is by Walter Crane, upon the subject, appropriate to the eminent author, "Of the Decoration of Public Buildings."

In this, the advantage of the organic over the inorganic theory of art, especially as applied to the decoration of public buildings, is set forth most conclusively. Public buildings, he says, should reveal national ideals, particular purpose, and adaptation to environment. Upon all three counts, therefore, he casts out the classic style from consideration as to its appropriateness in London architecture, whether private or public. For historical association appropriate to an industrial city, he would return to Guild-work, the style of the "old Guildhall, with its rich, open-timbered roof." With gentle satire, Mr. Crane criticises not only outward form, but inner decoration, by the preceding criteria. The finest of the mural paintings in the Houses of Parliament he considers to be the St. George of Poynter, but adds:

"Let us hope St. George is still in the Councils of England, and not merely on the back of her gold piece. He slew dragons *and restored ravaged lands to their rightful owners.*"

For formal heraldry, Mr. Crane has little patience; for the manifestation of its true spirit in consonance with the present age, the highest consideration. He exalts his special calling by proclaiming the best decorated building in London to be the National Gallery, because of its pictures; for he says, "a picture, after all, may be the finest piece of decoration in the world." He accordingly praises the decorative effect of the bill boards, "hoardings" as the English call them, with their brilliant poster advertisements designed by clever artists who have an insight into the popular taste for brilliant color and story-telling pictures. With them he contrasts to the latter's disadvantage. the "dull-as-ditchwater" mural decorations of the average public buildings. He makes notable exception of our own Boston Public Library, and the Manchester (Eng.) Town Hall, on the walls of which Ford Madox Brown has painted some of the most typical scenes of English history. Mr. Crane also commends for such purposes, story-scenes descriptive of industrial progress, such as "the inventor of the spinning jenny escaping from the factory people, who only saw their employment going."

Churches he would make "resemble our reception or drawing rooms, only on a greater scale." Schools should be great picture galleries of the physical changes of the earth, the heavens, epoch-marking events of history, invention, art and letters. Art, by this treatment, becomes characteristic of a nation, that is, expressive of ideals.

And, to quote from the concluding words of Mr. Crane, "the places where the highest thoughts and aspirations of a people are most fittingly and enduringly expressed are in the design and decoration of noble public buildings."

In the fourth lecture, Mr. Reginald Blomfield discourses "Of Public Spaces, Parks and Gardens." Upon the orderly distribution of these the city must depend for its exemplification of the "Fit, the Seemly and the Beautiful," even more than upon the harmony and appropriateness of its statutes, and public buildings. "It is not enough," the lecturer says, "that an architect should create a fine building, or the sculptor carve some excellent monument. * * * The streets and public places of the city should bind them together into one beautiful whole. * * * It is in this sense that architecture is architectonic—(it) combines the music of the other arts into one perfect symphony."

Mr. Blomfield bemoans the present lack of recognition of this principle, more especially in view of the splendid examples set by the ancients in the templed expanse of the Athenian Acropolis and the statue-crowned area of Apollo at Rome. To the military spirit of the Middle Ages, which caused the city to become only a crowded

penfold into which the landspeople could be gathered for safety, he ascribes the decay of the ancient love of liberal public spaces. The Renaissance restored something of the elder spirit, especially in garden design. The perfection of this is seen in the work of the architects of Louis XIV at Versailles and St. Cloud, and the author regrets that similar scope was not given to Wren in his plan of laying out London with three great "Places," one on Fleet Street Hill, another on Ludgate Hill and the third about the Mint and Royal Exchanges.

It would, he says, "have left London one of the most beautiful cities of Europe."

It is a great pity that Mr. Blomfield is content to simply mention that which is the chief cause of the failure of plans such as Wren's, and the resultant paucity in modern times, of public parks and spaces. Wren's two objects were "(1) to make the most of his buildings architecturally, and to provide fine vistas leading up to definite objects; (2) to provide the most direct and ample thoroughfares possible to the chief places of public resort." Now, as the author states, these principles, "though recognized in theory have been subordinated to other considerations. New streets have been planned *with regard to convenience of building sites, to get over the difficulty of some obstinate tenure, and to avoid the heavy outlay involved in a clean sweep.*"

To a man of such a strong ethical character and evident taste for economics as Mr. Blomfield reveals himself, these hindrances should not have appeared the insuperable obstacles which he seems to consider them. The simple solution is to regard the obstructing building site in its true light, a privilege created by the public, and hence at the disposition of the public. Abolish the present iniquitous "quiritary" system of land tenure by private persons and return to the common rights of all citizens in the soil, such as maintained in England before her second subjugation by Rome, that by law and custom, more potent by far than force and arms. Then, instead of having to meet the "heavy outlay" for purchasing what is ethically its own property, the city would be confronted by a problem much more pleasant of solution—the foregoing of a revenue from the land to be occupied, in order that even greater returns may accrue from the enhanced land values created elsewhere by the public improvement.

It is only when backed by such broad ethical principles as these that architecture, or any other art which will upbuild the City Beautiful, can ever become architectonic in the fullest meaning of the term, that of harmony with the divine order of the universe.

In the last lecture, "Of Colour in the Architecture of Cities," Halsey Ricardo expresses ethical principle in fuller measure than his fellows, probably because of an economic inheritance derived from his ancestor, the discoverer of the great natural Law of Rent. He treats the subject largely, and follows elemental suggestions, that of the blue of the sky and the green of the woods and fields. He would therefore deal with simple colors, heraldic in the broad sense presented by Mr. Crane, developing the beginnings which have been made in this direction. "Scarlet," he says, "is the proper tincture of the Post Office. On the seacoast * * * the eye is gladdened and the landscape relieved by the black and white heraldry of the coast-guard stations." In consonance with such examples, Mr. Ricardo would have our railway termini, "those huge vormitories" which are the "gates" of the modern city, lime-whited, together with all railway cuttings, arches and passages.

The very difficulty of preserving the purity of the color would, to his mind, be an advantage leading to frequent sanitary renovation, and, because of the expense thus

incurred, inciting efforts toward the abolition of the primal nuisance, the black dirtiness of coal-consuming London. In the meantime, he would put to its best use the very evil contended against.

"It is sufficient," he says, "on a mass of black to plant here and there pieces of blue in quite small quantities, and the whole area becomes one sea of sapphire; or * threads of green, * * * and (it) becomes a deep meadow; or * purple studs * and the black dissolves into a robe of violet. Consider how valuable a quality this is in a place like London, where a field of black is so easily obtained."

There is much that is practical in these suggestions. While the modern city will never rival Ecbatana, with its seven concentric walls, each colored in the hue appropriate to the heavenly body to which it was dedicated, or even mediæval Venice "sumptuously colored and gilt," nevertheless a whitewashed London would still have its charms. "There is this amiable quality about whitewash, that when you have whitened the building you have also colored it. The white seems to borrow and steal from far and near. It collects blue from the sky, green from the trees, red and russets from the walls, and sober shadings from the ground. It holds them lightly, tremulously—a cloud crosses the blue sky and the whole gamut of color vibrates in another key."

And this delicate appreciation of color is closely entwined with a deep ethical perception forming a union which gives the lie to Oscar Wilde's dictum that art has no part with morality.

Mr. Ricardo says: "Heraldry had its roots in war; * * * from tower and spire waved the pennons and standards, placed there by man's hand, but kept there by man's blood.

"We, too, have our strife—but it is against want and disease, dirt and disorder. We fortify our city against these enemies, setting our houses in order, summoned by the pity of these later days, and marshalled by the knowledge their science has given us. Strong and brave, let us go out to our fight clothed with the distinction that color can give us and cheered by the *camaraderie* that such color confers; and, the day's work done, there is the city beautiful—firm, stable—our home."

In the name of Col. Waring's "White Wings" we present to Mr. Ricardo our compliments for this admirable description of their office.

MARION MILLS MILLER.

The Manual of American Water Works, 1897. Fourth Issue. Edited by M. N. Baker, Ph. B. New York. Engineering News Publishing Co., 1897. A to N+611+LXV., pp. 8vo. Cl., $3.00.

Students of municipal government have often lamented the lack of accurate statistics concerning city government, but it seems now as if a better day were at hand. In one line at least one is able to ascertain with certainty what statements are true, which fact is largely due to the compilation in this Manual, from special returns, of the principal facts regarding water works in the United States and Canada. The aim of this volume has been to give a brief but comprehensive description of each plant, including its history, general character, the capacity of the pumps, reservoirs, stand-pipes, or filters; the extent of the distribution system, and the most important figures relating to the finances of each system. Great pains were taken to collect information, in addition, bearing on questions of the day, both those relating to economics and to water works practice, such as: The conditions of franchises; legal difficulties between private water

works companies and cities; conditions governing the use of meters; methods employed in raising money to meet the expenses of extensions to distribution systems; who pays, and how much, for tapping mains, for service connections and who for the connections themselves; and whether the several towns listed have sewerage systems.

But the work does not end here. There are valuable summaries which give one a general idea of the whole field and of the changes that have occurred since the last issue of the Manual, in 1890–91. Tables of water rates in over 1,250 cities and towns in the United States and Canada are appended, which are both interesting and valuable. It has often been stated that the municipalization of water works has been going on at a quite rapid rate, and in the Introduction one finds a summary stating that of the 3,196 works in the United States, 1,690, or 53.2 per cent. are owned by the public. Within the last six or seven years the per cent. of the works owned by the public has increased from 42.9 to 53.2.* A better standard of comparison would be the number of inhabitants served by private companies and by municipal undertakings; for a city of 1,000 inhabitants has just as much weight in the above figures as would Greater New York, if supplied by one company. It is to be hoped that some such comparison will be undertaken in subsequent issues of the Manual.

All in all, the Manual is a very creditable piece of work, and Mr. Baker deserves the commendation of every one interested in city government or the more special subject—water works.

American Street Railway Investments. By Edward E. Higgins. New York. The Street Railway Publishing Co., 1897. 289 pp., 4to. Cl., $3.00.

The edition for 1897 of *American Street Railway Investments* is a handsome quarto volume containing the latest facts and figures obtainable from this great and constantly growing industrial field. Direct information was received for use in this manual from 1,016 street railway companies, or 80.5 per cent. of the 1,262 companies reporting. Of the 246 companies (including 117 new corporations whose roads are not yet in operation) from whom direct information was not received, 101 reports have been brought up to date from official sources, and are entirely authoritative, while additional data was obtained from many of the others, either by personal correspondence with local parties or from other reliable sources. Of the 1,262 reports, 919 bear a "date of information" in April or May, 1897; 189 are dated in the first quarter of 1897; and 204 only bear date prior to January 1, 1897. The material is arranged alphabetically throughout, and an excellent index further facilitates reference. The following rubrics which occur under the names of all companies reporting, indicate the scope of the information contained in the Manual: Capital Stock, Funded Debt, Operation (receipts and expenses for the last five years), Balance Sheet, Plant and Equipment, Officers, Directors, General Office, etc., etc. Accurate maps of the larger cities of the country showing street car lines add much to the value of the statistical material. The manual is invaluable not only to investors but to all students of transit facilities in cities.

* Mr. John De Witt Warner, in his article in the present number, has cited other interesting comparisons. See pp. 441–443.

LEADING ARTICLES ON MUNICIPAL ADMINISTRATION AND CITY CONDITIONS.

JUNE—SEPTEMBER, 1897.

PUBLIC BATHS IN EUROPE.

The eleventh *Bulletin of the Department of Labor*, July, 1897, contains an extended report upon "Public Baths in Europe," by Dr. Edward M. Hartwell, of the Boston Department of Municipal Statistics. The report will be found full of valuable information by all interested in public baths. The experience of European countries, and the larger cities especially, is told in detail. Information upon every conceivable topic connected with construction and management of baths is given. Many diagrams and illustrations add greatly to the value of the article. It would be impossible to give a list even of the subjects considered, and if any criticism were to be made, it is that so much information is contained that an extended index is needed to save the investigator the trouble of reading the whole report when information upon but one topic is desired.

THE BOSSES AND THE PEOPLE.

In the *Century* for July, Mr. Joseph B. Bishop discusses the origin and characteristics of boss rule. The natural antipathy of the bosses to civil service laws and their desire to secure their repeal receive special attention. "They [the bosses] believe that they made an unnecessary blunder when they allowed the civil service reform laws to pass. As everybody knows, these laws were, in nearly every instance, passed by one party for the purpose of putting the other party 'in a hole.' Then, too, neither party believed at the time of their passage that the laws would ever be rigidly enforced. Neither did they foresee the advent of a man like President Cleveland, who would extend the system to such comprehensive limits. They now see that in trying to injure each other they have lost possession of what both desire most of all, and they are determined to recover the loss if possible."

Mr. Bishop's suggestion as to the best way to overcome boss rule is as follows: "The large cities afford the best field for work of this kind, and in them beginnings of the right kind have been made. The most effective method is the enrolment of all voters who favor good city government without regard to party considerations. This should secure in every voting district a compact body of men who should be of great service in many ways. They should hold themselves in readiness to make nominations by petition of men who will regard city interests above national party interests. They should make it their duty to enforce all corrupt-practice laws, and to get those laws strengthened wherever they are defective. They would thus become an engine

for good government which would awaken and educate public opinion, and make it a growing power before which the boss system would steadily and surely crumble away.

"This is a commonplace and laborious remedy, but it is the only one. There is only one way by which we can get good government, and that is to work for it, not only one year, but every year, and to work for it harder than the bosses and their followers do."

MUNICIPAL BUFFALO.

The August number of *Municipality and County* is given up entirely to an extended outline of the city government of Buffalo. It gives the various officers of the municipality; their powers, duties, salaries, methods of appointment or election and term of office; publications; statistical data as to the finances; public libraries; etc., etc. Any one interested in the municipal affairs of Buffalo will find this condensation of its laws and ordinances extremely helpful.

THE GENERAL PROPERTY TAX IN CALIFORNIA.

The American Economic Association publishes in its June issue an interesting and valuable monograph by Carl C. Plehn, Associate Professor in the University of California, entitled, "The General Property Tax in California." It is not within our province to notice this monograph, except in so far as it deals with municipal government, and with that limitation the paragraphs upon the inequalities in the assessment of urban and rural property are the most important. Professor Plehn says: "It would seem that the average farmer's real estate, which constitutes 90% of all his taxed property is probably assessed at from 8% to 12% higher than the average townsman's real estate, which forms but 80% of all his taxed property. It is undoubtedly true that the 90% represents more nearly the true proportion between the farmer's real estate and his personal property than the 80% does the proportion between the real estate and the personal property in towns.

"Whether these figures are absolutely correct or not, they clearly indicate that farming property (real estate) is assessed higher on the average than city and town lots. The showing is very instructive. It has frequently been pointed out that, theoretically, the general property tax is suited only to the simple economic conditions usually existing in farming communities. This view is usually supported on the ground that the great category of intangible, concealable personal property, which escapes taxation, is wanting in such districts. It is not usually supposed that there is any difference in the assessment of visible property, especially of realty. But so far as our results are safely conclusive, they show that the more complicated conditions of city life favor the underassessment of town and city lots also.

"There are two reasonable explanations for this: The first is general; the second local. In the first place farm lands change hands less frequently than city and town lots, and their value is consequently more stable. In the cities it is, therefore, necessary to leave a larger margin to insure against overassessment. In the second place the peculiar treatment of mortgages in California, which will be discussed later, results in a sharper assessment of mortgaged property. This affects 32% of the farm lands and only 16% of the city and town lots.

"But, after all, the payment each year by the farmer of from four to six cents too much on each $100 of his real estate for State taxes shrinks into ridiculous insignificance when compared with the injustice which arises from the evasion of taxation by personal property owners. This again adds peculiarly to the burden upon the farmer, the bulk of whose personal property consists of visible tangible implements, stock and household goods, nearly all of which are assessed at above 50% of their true value. When the tax rate for state purposes is 50 cents on the $100, which is considered a fair average rate, it is probable that an average farmer pays about 17 cents more on each $100 of property that he actually owns than does the average resident of the city. But far more serious than any differences between great classes are the differences between individuals of every class."

Professor Plehn notes the fact that, "When cities make their own assessment there is frequently little or no correspondence between the municipal and county valuations, even upon the same property." The history of Chicago furnishes a striking illustration. The total valuation of property in 1874 was somewhat over $303,000,000, but in 1875 it had decreased to $178,000,000 and continued to drop until in 1881 it had reached the low-water mark—$119,000,000. Such a condition was not the result of actually diminishing values (that goes without saying), but was brought about by changes in the method of choosing the assessors, and by the fact that the valuation given in 1874 was the basis of city taxes *only*, while that of 1875 and later was used as the valuation for assessing State taxes as well.

CAUCUS REFORM.

Mr. Ralph M. Easley, Secretary of the Chicago Civic Federation, contributes an article upon "The Sine Qua Non of Caucus Reform" to the September number of the *Review of Reviews*, in which he undertakes to show that the primary or caucus is a necessary feature of city government; and that a primary election law, when properly framed, will do much to reform present evils. Mr. Easley does not seem to be unmindful of the fact, that no system however excellently contrived and adjusted, can achieve beneficial results unless there is an intelligent class of citizens to operate it. Very properly does he call attention to the fact that "education of the people along the lines of practical politics has been woefully neglected. The coming generations should be better provided for. In all high schools and colleges 'practical politics' should be taught the boys and young men. A course of civics that does not teach the value of caucuses, primaries, and conventions and how to conduct them is vitally defective. Every citizen should be a politician.

"The duty of those who believe that the stability of our Republican form of government depends upon the purification of these fountains of political power is to organize with vigor on this issue alone. In this connection it may be stated that arrangements are now being made for a conference to be held in New York in October or November at which will be considered: first, the framing of a primary election law that will supply the defects of existing legislation; second, the arranging for presenting the subject to such legislatures as meet next winter; and, third, the awakening of public sentiment upon this question.

"The elective franchise is a sacred heritage. It is more than a mere modern convenience and is vastly greater than a social privilege to be worn, as one's best garments, on state occasions only. Its defenders should be drawn from every walk of

life. Good citizenship is not alone municipal citizenship, but state citizenship and national citizenship as well."

A somewhat similar article appeared in the June number of the *Arena*, entitled "How to Reform the Primary-Election System," by Edward Insley. After referring to various systems that have been proposed, and pointing out their defects, Mr. Insley states briefly the principal laws now upon the statute books and disapproves of all. He then proposes a remedy, the principal features of which are as follows: "An efficient primary-election law must be mandatory. If the primaries are to be held under the direct supervision of public officers, these officers must be paid out of the public treasury. It is impracticable to try to force political parties to deposit the money necessary for the purpose. The right of every citizen to affiliate with whatever party he may choose must be guaranteed, and his right to participate in the primaries of his party, and have his vote counted as cast, must be protected.

"Primaries of all parties should be held upon an arbitrary date—a certain time previous to each election. All should be held together—a single polling place for the primaries of all parties in each precinct—and under the supervision of one set of officials. There should be a separate primary in each election precinct. No alternates should be elected. It is a usual subterfuge to head a delegate ticket with the name of a man of known probity, and perhaps fill out the list with men of this character, when it is certain these men will not serve, and that unknown 'alternates' or proxies, subservient to the bosses, will sit in the convention.

"Certificates of election should be issued by the precinct judges to the person or persons receiving the highest number of votes, these certificates to be *prima facie* evidence of the qualifications of the delegates as members of the convention."

The article concludes with a brief analysis and criticism of the bills for caucus reform which came up in various state legislatures during the past winter.

LESSONS FROM THE PARIS FIRE.

In the July number of the *Engineering Magazine*, Mr. H. H. Statham draws certain practical lessons from the Paris fire in an article entitled, "The Paris Fire and the Building of Temporary Structures." From his description of the construction of the building, even the tyro in engineering science comes to the same conclusion as the author, viz.: "That nothing was wanting to prepare for a conflagration." Any one familiar with the extent of government control and supervision upon the continent is very much surprised to learn "that in Paris any contractor who receives the order may erect such a structure as this bazaar building, of the most inflammable materials he finds it convenient to employ, and on any plan he likes, without rendering himself subject to any official inspection or to any fine for evading regulations."

The practical lesson to be drawn from this great catastrophe is plain. It is imperative that all structures—and especially temporary structures—be under official control and supervision. *Laissez faire* is plainly inapplicable here.

London, Mr. Statham notes, is in advance of Paris in this regard, and it seems likely that American cities are not so far behind as Paris. It is certain, however, that much remains to be accomplished. Stringent building regulations are needed in all large cities, and those most opposed to the increase of municipal activity can hardly raise valid objections to their enactment. Mr. Statham concludes his article with a discussion of the best methods of building temporary structures and what regulations concerning them should be adopted by cities.

THE VEXED QUESTION OF GARBAGE DISPOSAL.

The *Engineering Magazine* for June contains an article upon "The Vexed Question of Garbage Disposal," by Rudolph Hering. To obtain data for this article circulars were sent to nearly two hundred cities, and replies were received from about one hundred and fifty. These replies were somewhat incomplete, but the information contained in this article, which is the sum of these reported results, is quite interesting. As an introduction to the discussion, Mr. Hering declares: "If the disposal of garbage and refuse is to be considered satisfactory in any city, it must be so from an economical, as well as from a sanitary, standpoint."

The various methods of garbage disposal in use in the one hundred and fifty American cities are summarized as follows:

"Filling in or plowing into land in forty-six cities.

Dumping at sea or into a large river or lake, in fourteen cities.

Feeding to animals in forty-three cities.

Reduction to grease and fertilizer in seventeen cities.

Cremation in thirty cities."

Mr. Hering then proceeds to consider each method, pointing out in what particulars each is efficient or inefficient. He plainly favors cremation, and calls attention to the fact that it is growing in favor in England and on the Continent.

THE GEORGE JUNIOR REPUBLIC.

All authorities on charity agree that the most effective charitable work can be done among children. The general acceptance of this principle of recent years has led to many interesting experiments to overcome the effects of the bad environment by which so many city children are surrounded. None of these have been more successful than the George Junior Republic, which Professor William I. Hull describes in the *Annals of the American Academy* for July. The social and political life of this boys' republic is described at length by Mr. Hull. One very interesting point is the way in which the same problems that come up in our national politics emerge in this little republic of forty-eight acres. "The economic questions which are continually arising are very similar to those which have long puzzled the heads of American citizens. For instance, at one time the government was too lavish in payment for work done under contract; the currency became inflated, prices increased four, five, and even ten-fold, speculation was rife, and then came a panic, followed by a period of financial depression and general ruin. The question, how to return to a 'gold basis' was long and earnestly debated, but probably the answer to it can yield American congressmen no enlightenment. Another question which arose was that of foreign competition and protection to home industries. Congress at one time passed a law permitting citizens who paid the government five dollars for the privilege to go outside of the Republic's borders. These citizens brought back with them apples and sundry other commodities which had been given them in the course of their travels, and proceeded to undersell the regular venders of those commodities. This caused much dissatisfaction, and Congress, after considering a variety of plans for solving the problem, drifted unconsciously into the system of a protective tariff. When such problems arise it is Mr. George's policy to leave to the boys the solution of them, his aim being to fix upon the citizens themselves the responsiblity for their own acts, and to permit them to learn by experience."

Miss Mary Gay Humphreys also describes the George Junior Republic in *McClure's* for July. Many illustrations contribute greatly to the interest of the article, from which the following summary of facts and figures concerning the Republic is taken:

"SIZE AND LOCATION.—Farm, forty-eight acres, in Freeville, near Elmira, New York.

INHABITANTS.—Two hundred boys and girls, between twelve and seventeen years of age, from tenement districts of New York City, pledged to remain seventy days, some stay longer—about forty all winter.

GOVERNMENT: Executive.—The chief executive is Mr. William R. George, the founder and president of the Republic. He holds the power of absolute veto on the actions of Congress.

LEGISLATIVE.—A Congress of two branches, Senate and House of Representatives. The members are elected by popular vote; senators for two weeks, representatives for one.

JUDICIARY.—There are civil and criminal courts, presided over by judges appointed by the President. Every citizen charged with crime is entitled to a trial by a jury of his peers. Imprisonment and fines are the penalties for crime.

POLICE.—A permanent force is maintained, chosen from the citizens by competitive examination.

FINANCES.—The Republic lays taxes, like any government, and maintains a bank and a monetary system of its own. It also derives an income from its tariff and the sale of licenses and passes, or permits to go outside of the grounds at will. The coin of the government is circular pieces of tin, stamped "George Junior Republic," and issued in denominations of from one dollar down. In this coin most of the business of the country is transacted; but the coin is ultimately redeemed by the government in potatoes and clothes, which the citizen is expected to send home. The bank receives on deposit the savings of the citizens, makes loans, and pays wages for government work.

PUBLIC BUILDINGS AND INSTITUTIONS.—There are three principal wooden buildings, and in summer several tents. The Capitol is Mr. George's residence. The court house, beside accommodating the several courts, contains also the halls of Congress, the police station and the jail. In the Waldorf Hotel building are located the bank, post office and dispensary.

EDUCATION.—The citizens attend school at the Republic, except a few of the most advanced boys, who attend the High School at Dryden, three miles distant. There are practically two schools, but only one of them is considered a school by the citizens; the second is known as a publishing house. The first, "the school," is established for the benefit of boys and girls who work and receive pay at other occupations in the Junior Republic, and to fulfill the law of the state. The second, or "publishing house," in fact, does the work of a school. The tasks that are set in this establishment are performed for pay at regular rates; to the younger employees, or pupils, simple problems in arithmetic are given, to which are added spelling exercises, and, finally, literary composition. There is a public library of over 600 volumes; and also an institution known as the "college" governed by a "faculty" composed of boys who are above sixteen years of age, and devoted especially to lectures.

TRADES AND PROFESSIONS.—All the citizens are encouraged to be workers, but idleness is not punished. Non-producers find themselves at a great disadvantage, and their moneyless condition soon brings them to the pauper's table, at which only the plainest fare is dispensed. The paupers are compelled to do a certain amount of work for meals and lodging. All the citizens who work at all receive good wages—the skilled laborers ninety cents a day, the unskilled fifty cents, and the middle class seventy cents. It should be explained that all the workers, boys and girls, are thus graded. The boys have their regular occupations—farm labor, landscape gardening and carpentering. A number are in the government employ; there are two lawyers, admitted after examination to the bar. Others are hotel and restaurant keepers, or engage in trade on their account. The girls employ themselves at sewing, millinery, laundry work and cooking. Only half the day is given to work; the remaining hours in summer are free for recreation."

THE GILL SCHOOL CITY.

The Gill School City, which is a very interesting urban application of the Junior Republic idea, is described as follows in *Public Opinion* for Aug. 26th:

"A somewhat novel experiment has been tried in New York, during the month of July and a part of August. Mr. Wilson L. Gill, who has done excellent educational work before, and who is president of the Patriotic League, is the inventor of a plan somewhat similar to that of the George Junior Republic, except that it is more comprehensive and is capable of being applied in public schools throughout the country. His plan is called the Gill School City, and consists in organizing a school into a perfect miniature municipality, governed exactly like large cities, with a mayor, aldermen, police, street cleaning, and health departments. The vacation school chosen for Mr. Gill's experiment is situated in the heart of the thickly populated east side of New York. The school, which numbers nearly 1,200 children (nearly all of Jewish parentage), is divided into "boroughs" like those which will comprise Greater New York. Each borough is properly represented in the city council. The officers of the city are elected exactly as they will be under the Greater New York Charter, and the departments work in the regular way. The street cleaning department has drawn up laws which oblige children to keep the school building and yard in order and not to deface any school property. Its members are promoted from drivers to be street cleaners, then foremen and finally superintendents, each boy or girl doing a useful work to typify that which the employees of the real city perform. They send in regular reports to the street department of the work done by them in the neighborhood, and since they have been carefully taught the law on the subject, there are few mistakes made and about five thousand corrections of genuine violations of sanitary code are reported every month. The health department of the school city has also received suggestions and advice from the Health Department of New York, and is to have leaflets printed for distribution, not the serious and scientific leaflets of the larger department, but bright and popular pamphlets suited to the neighborhood. The police department is carefully supervised. The three judges, consisting of two boys and a girl, recently impaneled a jury to try a police captain accused of improper conduct; the verdict 'guilty' was returned and the captain, much to his chagrin, deposed.

"Mr. Gill is entirely satisfied with the success of his experiment in New York and hopes to spread it throughout all the large cities of the union. He expects that in New

York it will be made a permanency in two or three schools this coming fall, and the Hoffman school of Philadelphia, has definitely decided to introduce it immediately. Mr. Gill's idea is that the system of absolute monarchy enforced in our schools to-day is an injustice both to the teacher and to the pupil. Certainly the children of the East Side have shown themselves capable of self government; their pride in school order has been most gratifying. Mayor Strong, of New York, as well as all the heads of the departments, have given the school city their cordial sympathy and co-operation, believing that the children can never be too early trained to take part in municipal affairs."

"'HOMEWOOD'—A MODEL SUBURBAN SETTLEMENT."

Persons interested in the housing of the working classes, the abolition of the slum districts of large cities and the development of suburban proprietorship will read with much profit and enjoyment the article by Dr. E. R. L. Gould, President of the City and Suburban Homes Company, upon "Homewood" in the July *Review of Reviews*. "Homewood" is a tract of 580 lots in the southwestern part of Brooklyn, a short distance from the seashore, and its advantages in every line are very marked. Here it is proposed by the company to establish a suburban village for the accommodation of families of moderate circumstances.

"The Company aims," says Dr. Gould, "to invest its resources for the benefit of those who are relatively in the least favorable position to help themselves. I do not mean men who have a hard time to get along as tenants, because it would be a mistake to encourage such persons to incur obligations they would almost certainly be unable to perform. But mechanics, lettercarriers, policemen, firemen, clerks, bookkeepers, in fact that great body of persons earning from, let us say, $800 to $1,500 a year—these are the ones whose patronage is chiefly sought."

The details of the process of securing homes are given briefly, and are such as to permit a family to acquire a home at a reasonable expense and upon very fair terms. To prevent loss to the Company by death of the head of the family, life insurance is insisted upon, and no man will be accepted who has been rejected by the insurance companies, which condition keeps out an undesirable class. It also prevents the Company from being obliged to dispossess a widow and her family, for the insurance will pay the sum yet due, if any, upon the home. In fact all the conditions imposed are for the purpose of putting the company upon a secure basis and leaving no possibility of forced assignment.

"A forecast of the extent and usefulness of such work is not difficult to make. There is no doubt that thousands upon thousands of honest, self-respecting, ambitious men would gladly escape with their families from the unhealthfulness, uncomfortableness and moral contamination of congested tenement life. Especially in the earlier years of marriage would they gladly avail themselves of fair opportunities. More have refrained from becoming owners because of the comparative costliness—sometimes also of the unfairness of the schemes presented. Excessive cost and hard dealing have characterized so many schemes that wage-earners are naturally suspicious. Still, many, at a great expense and more or less inconvenience, have embraced opportunities to purchase homes. If the home-getting, home-loving instinct is ever eliminated from the Anglo-Saxon temperament, social politics will assume an entirely new aspect. There are few American, English or German-born workingmen who will lightly cast aside the opportunity to become the owner of a small home under a sound, practical and reasonable plan."

HOUSING OF THE ENGLISH POOR.

In the *North American Review* for July, Lord Monkswell presents a brief but comprehensive sketch of the movement for the better housing of the English poor from the time of Lord Shaftesbury to the present day. The great improvement that has resulted from the fight of half a century against dirt and overcrowding is brought out very forcibly. The different agencies that are attacking the problem to-day are described, and the value of their results estimated. Lord Monkswell considers the blocks of workmen's dwellings erected by the London County Council less successful than the dwellings erected by a number of private companies. In many cases, the cost to the city of acquiring property was far above its market value. Lord Monkswell considers the problem of housing far from hopeless. "It is certain," he writes, "that the evils of overcrowding and bad sanitation are steadily diminishing, and will continue to diminish. The Peabody & Guinness Trusts are and have been dealing on a large scale with the housing of the poor. Their efforts are being supplemented by those of numerous public companies, some of which have imposed upon themselves a maximum limit to their dividend of four or five per cent. Local authorities are making experiments in the same direction, and it has even been proposed, perhaps with doubtful wisdom, to increase the powers of those authorities by enabling them not only, as they can do at present, to erect workmen's dwellings, but also to take upon themselves the functions of building societies, and lend money to artisans to buy their own houses.

"Perhaps the most satisfactory feature of the general outlook is that the standard of living of the working classes is being raised. Lord Rowton, an expert and enthusiast on workmen's dwellings, and one of the prime movers in the administration of the Guinness trust, finds that the demand for single-room tenements is decreasing, and that new buildings will have to be erected on more commodious lines than the old.

"Many causes have no doubt contributed to this result. The crowded parts of London have now been thoroughly explored not only by the medical officer and sanitary inspector, but by an army of philanthropists who live near the poor at Toynbee Hall and Oxford House and elsewhere; by missions started, maintained, and begged for by clergy of all denominations, and by nurses and sisters whose devotion to their calling is beyond all praise."

THE KINDERGARTEN IN THE CHICAGO SCHOOL SYSTEM.

The *Kindergarten Magazine* for May contains a very suggestive article by Miss Nina C. Vandewalker on "The Kindergarten in the Chicago School System." In 1892 the board of education of that city formally adopted several kindergartens which had been opened and supported by the Frœbel Association and the Chicago Kindergarten College. So well have these done their work that the number has been increased as rapidly as space in school buildings and funds for that purpose would allow. There are at present forty-five, with calls for more from every part of the city.

Miss Vandewalker's estimate of the social value of the kindergartens as a part of the school system is as follows: "The influence of the kindergarten upon the locality in which it is situated is a great factor in the recognition of its value by all classes alike. At present the problems of education are sociological rather than pedagogical. It is not more skillful teaching, not more perfect organization, not even a deeper insight into psychological principles, upon which educational thought is focussed to-day,

though all these are needed ; it is the relation of school and of education to the great social movements of the time. A new gospel of humanity is stirring the hearts of the people, and finding its expression in the social settlement and kindred movements. But the underlying principle of the settlement is co-operation, and this must become the watchword of education. As this truth is permeating the educational world, the kindergarten, as embodying this spirit, has assumed a new significance and interest. In it is found a direct point of co-operation between home and school, which, if extended all along the line, would go far toward realizing what is hoped for. Hence the public school needs the kindergarten as an entering wedge for that co-operation of social forces in a community which has so long been lacking. But if the school needs the kindergarten, no less does the kindergarten need the school. Up to the present time it has necessarily stood as an end in itself ; by becoming a means to a greater end it will contribute in a greater degree to true education. How greatly each needs the other in Chicago, only those who are familiar with the problems of a great city can answer. That such unification would, in time, differentiate the social work of the public school kindergarten from that of the private or free kindergarten is doubtless true. It will become both narrower and broader—the former because of the necessity for avoiding a sectarian bias ; the latter because of its identification with the general movements of education."

MAYOR vs. COUNCIL.

"Mayor *vs.* Council" was the subject of the twenty-seventh annual debate of the Literary Societies of the University of Wisconsin. The question is stated as follows : "Should a system of municipal government concentrating all the executive and administrative powers in the Mayor be adopted in cities of the United States of over forty thousand inhabitants?" The following definitions were accepted by both sides : "Executive and administrative powers to include the sole power to appoint and to remove all heads of departments and chief city officers except the Treasurer and Comptroller. The Comptroller to have only the powers of an accounting officer. All subordinates to be appointed by the head of their respective department, under Civil Service rules, and to be removed by the same for cause other than political. The Mayor, the heads of the departments and the city officers in their respective capacities to have the power :—to make all contracts ; to purchase all materials and supplies ; to have charge of the construction, improvement, extension and management of all public streets, works and property ; to grant all licenses, and franchises, subject to confirmation by the Common Council ; to make all estimates for the following fiscal year, said estimates not to be increased by the Council." It was conceded that the system described above is valid under the laws and constitutions of the States and of the United States.

The decision was given for the negative. The following are a few of the points made by the respective debaters in the course of their argument : Affirmative—"City governments are primarily business corporations. What business man would divide the management of his business among a score of conflicting and irresponsible parties ?" When the Mayor is the real head of the city, "there is definite responsibility on the part of the officers. The departments are so related to one another through the Mayor that unified, harmonious, economical and responsible administration can be secured." This system is termed "the federal plan." It is claimed that legislative and executive functions are separated, and the Mayor is made directly responsible to the people. Another

speaker says: "Our cities are concerned to a much greater degree than our National and State governments with business questions. The functions of the executive department are purely those of business. The erection of buildings, the cleaning and paving of streets, the disposal of sewage, the management of water and lighting plants, the making of contracts, all are questions of business, and to be managed successfully must be conducted in accordance with the principles that are essential to the successful management of any private enterprise." It is contended that "the first essential for the successful management of any corporation, public or private, is a strong, efficient and responsible head, who has the power to carry out a continuous and consistent policy." It is also claimed that by fixing the responsibility better men are secured. "Any man, when responsibility is fastened upon him, fears public criticism and respects public opinion." The third speaker for the affirmative, in summing up the chief characteristics of his plan. says: "It makes a sharp division between the legislative and executive departments of government; it abolishes the existing conglomeration of irresponsible boards and consolidates them into a sufficient number of responsible single-headed departments."

Negative—Speaking of locating responsibility, the first debater says: "While the idea of located responsibility may sound well in theory, in practice it has proven most unsatisfactory. Located responsibility goes for nothing if it does not remove corruption from municipal government, and here the system of the affirmative has ignominiously failed." The failure of municipal government in the United States is attributed to the indifference of the people. The wonderful success of municipal government in England, Germany, France and Scotland is mentioned. Replying to the assertion of the affirmative that a city is simply a large business corporation, the negative says: "Now, attractive as is such a comparison, it is nevertheless a great and popular fallacy. In the first place, a city is not a business corporation, but a body politic. The many court decisions affirm the truth of this statement. The city exists to provide for the health, safety, comfort, education and pleasure of its people, while the business corporation exists primarily to declare as large dividends as possible for its stockholders. The one exists to spend money, the other to make money." The same speaker contends that by lodging such great power with the Mayor a speedy deterioration in the character of the councilmen will follow. The above extracts serve to show only the general lines of the discussion. Many authorities are quoted on both sides and many illustrations cited. The debate gives evidence of long and careful study, is most timely, and reflects credit upon both the debaters and their instructors. Messrs. Gilbertson, Page and Bosshard. representing the Athenæ Literary Society, spoke in the affirmative; Messrs. Compton, Nelson and Brazeau, representing the Philomathia, in the negative.

MUNICIPAL CONDITIONS IN CALIFORNIA.

"Municipal Conditions in California" is the subject of an article in the June number of the *Arena*, by Hon. James D. Phelan, Mayor of San Francisco.

The early citizens of San Francisco "regarded their sojourn in California as only temporary, and expected to return ultimately to their Eastern homes. * * * * This early indifference has produced two curious results, interesting to students of municipal government.

"First, so thoroughly safeguarded were the powers conferred upon the supervisors and the city officials, and so reluctant were the people, only mindful of their immediate

wants, to discount an uncertain future which they did not expect to enjoy, that comparatively no public debt was created, and we have a municipality without bonds. San Francisco has grown in fifty years from nothing to a city of 350,000 people; has constructed streets, erected public buildings, schools, and hospitals, laid out parks, one of which, reaching to the Pacific ocean, is maintained out of taxation at an annual cost of a quarter of a million dollars; and yet the city may be said to have practically remained out of debt.

"Second, while San Francisco has accomplished this, yet, unlike other cities which have large bonded indebtedness, she owns no public utilities. The same short-sighted thrift which saved the city from borrowing, also deprived it of owning. Public property, it is true, to the value of $25,000,000 stands in the city's name, a part of which is inherited from the old Spanish pueblo, and a part has been paid for by taxation; but the great tax-levying corporations, performing municipal functions, have been allowed to usurp the municipal powers and occupy a field which modern municipal development has made so inviting. * * * To-day, the street-car service, the telephone, telegraph, garbage disposal, water, and artificial light are owned by private corporations."

Mr. Phelan devotes the remaining half of the article to a plea for municipal ownership of "utilities," which is very interesting, but throws no particular light upon conditions in San Francisco. Considerable attention is paid to the ethical questions involved in the purchasing of franchises now held by private corporations.

MUNICIPAL LIGHTING IN THE UNITED STATES.

In the May number of the *Journal of Association of Engineering Societies* there appears an article by F. W. Cappelen on the above subject.

Sixty six questions were sent out by a committee of the American Society of Municipal Improvements to the principal cities of the United States and Canada. One hundred and seventy-one cities, containing a total population of 6,654,096, replied. The statistics gathered show the number of lamps maintained by each city, the cost per year, the candle power of the lamps, method of lighting—whether by contract or works owned by the city, the number of hours the lamps are run, the various methods of lighting streets, etc., etc.

The article contains a number of practical suggestions as to the best method of street lighting, but these are quite technical in character, and are of more interest to the electrical engineer than to the student of the general problem of city government.

MUNICIPAL ADMINISTRATION: THE NEW YORK POLICE FORCE.

In the *Atlantic Monthly* for September, Mr. Theodore Roosevelt describes and defends the course of the police board of New York during the present city administration. The enforcement of the excise law naturally comes in for a large share of his attention; but other details, such as the maintenance of discipline, and the application of civil service rules are by no means lost sight of. In discussing the relation between the experience of the board and the general problem of municipal administration, Mr. Roosevelt says:

"Our experience with the police department taught one or two lessons which are applicable to the whole question of municipal reform. Very many men put their faith in some special device, some special bit of legislation or some official scheme for getting good government. In reality, good government can only come through good administration, and good administration only as a consequence of sustained—not spasmodic—and earnest effort by good citizens to secure honesty, courage, and common sense among civic administrators. If they demand the impossible, they will fail; and, on the other hand, if they do not demand a good deal they will get nothing. But though they should demand much in the way of legislation, they should make their special effort for good administration. We could have done very much more for the police department if we had had a good law; but we actually accomplished a great deal although we worked under a law very much worse than that under which Tammany did such fearful evil. A bad law may seriously hamper the best administrator, and even nullify most of his efforts; but a good law is of no value whatever unless well administered. In other words, all that a good scheme of government can do is to give a chance to get the good government itself, and if the various schemes stand anywhere near on an equality, the differences between them become as naught compared with the difference between good and bad administration."

NON-PARTISANSHIP IN MUNICIPAL GOVERNMENT.

Ex-Governor Roswell P. Flower and State Senator Frank D. Pavey discuss in the *Forum* for July the principle of non-partisanship in municipal government. Mr. Flower defines non-partisanship as the contention that "city government is primarily and principally a matter of business administration, and, therefore, that city elections should not be contested on party lines, but simply on local and personal issues." His argument, however, is not directed against real non-partisanship as he understands and defines it and which he admits "seems reasonable," but against that masquerading mockery of it which, for lack of a better name, we may call "multi-partisanship." Mr. Flower's assertion "that anything approaching disinterested and successful non-partisanship in city government, however well intended, is, under existing conditions, almost impossible," remains yet to be proven. His defense of partisan municipal government is as follows: "Illogical and unreasonable as division on party lines in municipal contests may be called, I do not see that, in itself, it is an evil; I do feel that it is often a powerful bulwark to the cause of order and good government. Where universal suffrage prevails, as it does in America, and no qualification of intelligence or property is imposed, it is a very fortunate thing that men are divided into parties, and that the strength of party ties is able to restrain the ignorant, the depraved, the impetuous from the advocacy of dangerous doctrines, or the support of unsafe men. In the great cities of New York and Brooklyn, where so large a proportion of the voters are of foreign birth, and where there are so many ignorant persons easily swayed by un-American influences, the restraint laid upon that element by the powerful political organizations, with their clubs and workers in every election district, has many times been the greatest protection to good government in those cities, and must still continue to be to the government of Greater New York. To encourage political independence among the ignorant and vicious, and to break down the power of political organizations which hold these in check, is to stimulate anarchy and to open the way for socialistic attacks upon property. The possible evils of partisan government had

better long be endured than to incur any risk of delivering the city over to the power of such dangerous elements.

"Conceding, moreover, as the advocates of non-partisanship do, that party divisions and organizations are needed and desirable in state and national politics—although logically it would seem that, if the theory of non-partisanship were sound in local politics, it should apply equally in larger politics—the best way to keep a live and active organization for the success of political principles that concern State and Federal governments is by encouraging party activity in municipal affairs. A battle for tariff reform or honest money might be lost, if party activity were reserved only for Federal elections. Municipal politics frequently appeal directly to the party organization; and, while it is true that a candidate's ideas or opinions on the tariff or money question do not affect his ability to discharge municipal duties faithfully and satisfactorily, and that for this reason division on party lines is unnecessary, nevertheless, such divisions are not only harmless, if properly directed, but absolutely essential for effective party work in the wider fields of political activity.

"Behind any defense of municipal government by party, however, must stand the imperative condition that the party organization be intelligent, honest and broad-minded. Corrupt and incapable local organizations cannot give good local government, and are a menace to party success in either state or national contests. But with clean men directing party efforts, encouraging the nomination of good men for office, and insisting upon honest, faithful public service as a condition for rewards, municipal government is safe in partisan hands, and evils which have grown up under control by party need not exist.

"My suggestion, therefore, to those who deplore partisanship in municipal affairs, is to think carefully before they try to break down local political organizations, lest, in doing so, they invite from unseen sources graver dangers than have yet confronted us, and evils not so easily eradicated as those which might be due to corrupt party government.

"The more practical and useful effort is to build up, purify, and broaden political organizations, so that their great power may be more effectively wielded for good government, whether in the city, the state, or the nation. A constant watchful citizenship, yielding its support to the party which renders the best public service, can accomplish much more permanent good by working through an existing and well-developed organization than by spasmodic efforts in methods which both experience and common sense indicate to be ineffective and uncertain."

Senator Pavey's article in reply to Mr. Flower is not so much a discussion of the principle of non-partisanship in general as a defense of Mayor Strong's administration of New York City, department by department. The police and street cleaning departments are given special attention. Mr. Pavey makes the following reply to the charge of extravagance brought against Mayor Strong's administration: "The one charge of failure that may be pressed plausibly against the administration of Mayor Strong is the increase in the expenditures of the city government. For several years prior to his administration, there had been a steady annual increase in the public debt. This increase was mainly for expenditures on improvements of a permanent character, such as the purchase of lands for public parks and docks, the erection of school buildings, police and fire stations, armories, museums, hospitals, asylums, bridges over the Harlem river, the repairing of streets and avenues, increasing the water supply, and similar changes rendered necessary by the growth of the city. The regular annual increase in the

public debt has been accelerated during Mayor Strong's administration for the simple reason that the construction of all such permanent improvements has been accelerated. Those already planned have been finished or pressed forward toward completion. New works have been projected, and in many cases executed, with a promptness formerly unknown in New York.

"The financial success of a municipal administration must be measured by the same standards that would be applied to any large business enterprise, or to the execution of a great charitable bequest. It should not be determined by the actual expenditures themselves, but by an intelligent comparison of the results achieved by the expenditures, whether greater or less than in a former year. Judging by such a comparison, the people of the city of New York may be well satisfied with Mayor Strong as trustee of the city's funds. They have paid more because they have received more—both in quantity and quality—than in former years."

A POLICE DEPARTMENT IN CHARITABLE WORK.

"The Department of Police as a Means of Distributing Charity" is the title of an article by A. F. Campbell, Secretary of the Chicago Department of Police, in the *Open Court* for June. It appears from this article that the appropriation for the relief of the poor for the winter of 1896–7 had not been adequate, and that during the intensely cold weather in January Mayor Swift issued a proclamation asking the citizens of Chicago for funds to relieve the suffering among the poor. The public responded by contributing over $61,000, and the Mayor decided to have the relief distributed by the police. The result is interesting as showing what can be accomplished in an emergency "by using a thorough organization that is familiar with all parts of the city and the location of the poor." The report says: "Our meat amounted to 546,232 pounds at an average cost of 4.22 cents per pound, making a total of $23,084.76. Our orders for bread amounted to 470,736 pounds, a total of $13,296.90, an average of 2.82 cents per pound. Our orders for meal, beans and peas amounted to $9,750.48, an average cost of about 1 cent per pound. Our coal orders amounted to 6,004⅛ tons, or an average of 2.82½ per ton, costing $13,720.72. We furnished food and coal to 65,557 families; an average of 2,781½ families a day, or a total of 304,802 persons; being an average of 12,700 persons a day." The report further states that there was a great reduction in the number of crimes committed while the relief work was going on. "The crimes of robbery, larceny and hold up fell off fully 33 per cent."

It is interesting to note that the whole distribution was done without extra expense —"every cent contributed to this fund was used in the purchase of supplies. There was not one cent paid out for clerk hire, rent, extra time or other expenses."

PROBLEM OF NEXT CENTURY'S CITY.

The many readers of Rev. Josiah Strong's two books, *Our Country* and *The New Era*, will be interested in learning what he considers the "Problem of Next Century's City." In the September number of the *North American Review* Dr. Strong asserts that "the city is to contain an ever-increasing proportion of the population and to constitute a factor of ever-increasing importance in national life," and that "there is to be a greater Boston and Philadelphia, a greater Chicago and San Francisco." The

wonderful growth of cities is due, he claims, "primarily to three causes: (1) The application of machinery to agriculture, which enables four men to do the work formerly done by fourteen; (2) the rise of manufactures in the cities, which attracts the men released from the farms, and (3) the railway, which not only makes the transfer of population easy, but, which is more important, makes it possible to feed a massed population, no matter how vast. There is a gregarious instinct in men which has always made the city as large as it could well be; and these three causes have liberated and emphasized this instinct during the century. As this instinct and these causes are all permanent, it is obvious that this tendency will prove permanent."

Dr. Strong does not believe that the pressure upon the city can be relieved, or the pressure upon the slums modified by removing families to unoccupied lands and teaching them to engage in agriculture. The economic organization of industry prevents it. The time when the farmer produced all he needed to consume and in the form which he wished to consume it, has irrevocably passed. In that earlier period "the number of farmers might have been indefinitely multiplied so long as unoccupied land remained; and if we could reverse the motion of the earth and roll it back into the age of homespun, we might relieve the pressure upon the city by planting families on unoccupied land; but with the division of labor this became impossible. The farmer can now do but one thing, and that is to farm. He can supply the many wants of his family only by turning his produce into money, which means that he must farm for the market. This fact makes him dependent upon the demand and supply of the world. Now it should be observed that the world's demand for food must necessarily be limited and that the food supply to-day is equal to the demands of the civilized world to-day. It is true that there is want even to starvation, but that is due to the lack of distribution, not to any lack of production. There are already more persons engaged in farming than are needed, with the improved agricultural implements of recent years, to supply the world's demand for food, and that accounts for the general depression of agriculture in Europe and America during recent years. If we could transfer 100,000 families from our crowded cities to unoccupied lands, and so train them as to make them successful farmers, the world would not consume any more food to accommodate them. They could succeed only by getting the market, and they could get the market only by driving 100,000 other farmers out of it, which would mean driving them off the farm and into the city."

Neither can the problem be solved, Dr. Strong contends, by improving the methods of agriculture. "Our American agriculture must certainly be more intelligent if it is to retain its markets, but the attempt to stop the exodus from the country by better farming will prove worse than futile. Intelligent farming succeeds because a given amount of effort when intelligently directed produces greater results. Inasmuch, then, as the amount of food which the world can consume is limited, the more intelligent the farming is the smaller will be the number of farmers required to produce the needed supply; so that the more intelligent farming becomes the larger will be the number of farmers driven from country to city.

"Of course population will increase; but increased production by reason of improved methods is likely to keep pace with it for many years to come. * * * * It has been pointed out that the world's demand for food is necessarily limited. This fact places a natural limit to the number of men who can successfully devote themselves to producing the food supply; but there is no such natural and necessary limit to the world's consumption in other directions. * * * * From all this it follows that, as

population and wealth increase, an ever-enlarging proportion of men must get their living by means of the mechanical and the fine arts; or, in other words, an ever-increasing proportion of population must live in cities."

Regarding the importance of "The Problem," Dr. Strong says: "If the rate of growth from 1880 to 1890 continues, in 1920 the cities of the United States will contain 10,000,000 more than one-half of the population. The city will then control state and nation. What if the city is then incapable of self government? * * * We have for years relied upon the country vote to hold the cities in check, but the time is soon coming when the cities will take matters in their own hands. The greater part of the population must live in cities—cities much greater than the world has yet seen—cities which by their preponderance of numbers and of wealth must inevitably control civilization and destiny; and we must learn—though we have not yet learned—to live in cities with safety to our health, our morals and our liberties."

How the problem is to be met and solved is described in these words: "The problem of the twentieth century city, therefore, demands for its solution a higher type of citizenship, for which we must look chiefly to those who direct the education of the young. Evidently, our public schools must give to the children and youth of to-day such instruction in the duties and principles of good citizenship as earlier generations did not have. Literature dealing with American citizenship, adapted to all ages, from the high school down to the kindergarten, should be absorbed by the scholars until an intelligent civic patriotism becomes a matter of course. We dare not rely on campaigns of enthusiasm; it is still true that eternal vigilance is the price of liberty. If tidal waves come, they also go. If our liberties are to be secure, patriotism must be, not a mere impulse, but a fixed principle, rooted in the heart, informing the mind and inspiring the life."

THE SHIFTLESS AND FLOATING CITY POPULATION.

In the *Annals of the American Academy* for September, Mr. Edward T. Devine of the New York Charity Organization Society, discusses the problem presented by the shiftless and floating population of great cities. His standpoint is that "of the reformer who looks for radical change in the long run, and who accepts meanwhile the necessity for remedial measures." Mr. Devine bears witness to the efficiency of the improved methods of dealing with the floating population of New York, inaugurated by the present city administration. The establishment of the municipal lodging house and the consequent discontinuance of the thoroughly bad custom of providing lodgings at police stations, the cumulative sentence law, the new registration and election law making the traffic in votes impossible, the abolition of the free lunch, the disappearance of the stale beer dives owing to the general introduction of a more effective apparatus for drawing the beer from kegs, and finally, the vigorous campaign of the police against street mendicancy, have greatly simplified the problem as it exists on the Island of Manhattan to-day. Mr. Devine discusses very ably the various other methods proposed for the solution of the question. The farm colony plan does not meet with his approval. "It does not go to the root of the matter. Considered as a comprehensive plan for restoring to productive industry the general body of inefficient young men now vagrants, it rests upon the mistaken assumptions that the flow of population to the city is an evil, that it is remediable, that those who prove incapable in the city can be rendered self-supporting most easily by teaching them something about farming and thereupon transferring them to the country.

"These have long been the prevailing views of a large class of reformers, but without going deeply into the matter I venture to suggest that it is useless to dissipate valuable energy in an attempt to prevent a movement of population which has shown itself to be world wide and to rest upon necessary economic changes. The agricultural revolution which has been in progress is not finished, and it is a question whether we are not protracting the period of suffering by every attempt to induce an incapable worker to remove himself from town to country.

"Workers must go where the work is to be done, and the industrial changes in progress clearly indicate that an increased proportion of the work to be done by human labor will lie in the industrial centres either in or immediately about the great cities. The inefficient farmer may be trained to efficiency in a subordinate position on the farm as the small farms are merged into larger, but the inefficient builder, weaver, forger, machinist, furnace-man, longshoreman, garment-maker, and common laborer of the town must be transformed into the efficient laborer at the expense of the town, in institutions teaching town trades, having in view future residence and productive labor in the town itself.

"The farm school, therefore, in a general remedial scheme, should be but one, and probably the least important, of a series of correctional and educational agencies, and the goal is not transference indiscriminately of all the incapables of the city to the soil but the placing in some honorable industry of all who develop the qualities essential to success in any."

Mr. Devine believes industrial education to be one of the most effective methods of dealing with the problem of our shiftless population. If in the school we train all of both sexes in such a way that they will be able to turn when occasion arises from one occupation to another, and if we admit no immigrants save those who have acquired equal capacity elsewhere, the amount of correctional training required will be reduced to a minimum. * * * * * Taking into account the national interest as a whole, the city is a better and less dangerous and less expensive place for the vagrant than the country. His migration to the city should be welcomed rather than discouraged. If he is in the city we shall be more conscious of his existence, but for that very reason we shall be better able to deal with him. There is greater taxable wealth and, therefore, greater resources for charitable relief and for correctional discipline. The whole of the repressive and remedial work can be done more efficiently and with better opportunities to watch the results than in the country. What the conventional view amounts to is that we of the city have done our full duty when, at the expense of the country, we have gotten rid of the greatest possible number of individual vagrants, incapables and unfortunates, adults and children. This short-sighted view must be displaced by a determination to shoulder courageously the burden of our own dependency. What is objectionable is not the return to the country of those who clearly belong there, provided they are intercepted within a reasonable time, or the restoration to farm life of any who show the qualities required in it; but the assumption that a farm training is the natural cure for the general shiftlessness and vagrancy of the city and that there is some peculiar virtue in farm life which will eradicate the in-bred disease of dependency."

The effect of lodging houses and Salvation Army shelters in making life easier for the floating population of a great city is briefly touched upon. Mr. Devine's general proposals for the future treatment of the problem are as follows:

"The irresistible conclusion of the most careful study will be that the fundamental

difficulty is in the home and school life of the young people. The correctional devices to which some attention has been given are needed only to give society a better chance, as it were, to work at its social and educational problem. Kindergarten, manual training, trade schools, professional training for public school teachers, instruction in the best ways of using an income, large or small, the prevention of indiscriminate charity, organized, intelligent effort on behalf of individuals and families in distress, the proper care of homeless children, the study of social conditions in college settlements, the creation of public opinion by the extension of university teaching—these are the methods which, without any desire to be eclectic and conciliate everybody, but only with an intense conviction that our whole social problem is one, I propose as the means of eliminating our shiftless and floating population."

THE SMOKE NUISANCE.

The June and July numbers of the *Journal of the Franklin Institute* contain articles upon "The Smoke Nuisance and its Regulation, with Special Reference to the Condition Prevailing in Philadelphia" The articles, which are reports of a discussion before the Institute, deal chiefly with the engineering features of the subject. Various plans are presented whereby coal may be burned without the creation of large quantities of smoke, and it is plainly shown that there are many ways in which the smoke nuisance can be prevented, with little cost to the owners of factories. In fact, it seems to be plain that it is economical to so construct the furnaces or so feed the coal as to produce little smoke.

On the basis of the discussion mentioned above, it was resolved "That it is the sense of this meeting that the continuous or frequent discharge of dense black smoke from the combustion of bituminous coal is unnecessary and should not be permitted within the city limits."

Appended to the articles are the smoke ordinances of the principal cities in the United States.

THE SOCIAL VALUE OF THE SALOON.

In the *American Journal of Sociology* for July, Mr. E. C. Moore discusses "The Social Value of the Saloon." The nineteenth ward of Chicago, which has a population of 48,280 according to the census of 1896 was chosen as a typical district for investigation. This is a workingman's district, and a large proportion of the inhabitants are unskilled laborers. Beside the saloons, four churches and a few trade unions attempt to meet the social needs of the population. There are no music halls or theatres in the district. Mr. Moore's standpoint is stated as follows: "It was assumed in beginning the investigation that an institution which society has so generally created for itself must meet a definite social demand; and that the demand was not synonymous with a desire on the part of society to commit suicide by means of alcoholic poison was granted. The question became that of fixing the demand, of determining the social value. What does the saloon offer that renders it so generally useful, in the economic sense, to the great mass of those who patronize it? For it is use, not abuse, that it stands for."

Mr. Moore enlarges upon the value of the saloon as a social center. "Primarily the saloon is a social center. Few will deny this. It is the workingman's club. Many of his leisure hours are spent here. In it he finds more of the things which approximate to luxury than he finds at home, almost more than he finds in any other public place in the ward. In winter the saloon is warm, in summer it is cool, at night it is brightly lighted, and it is always clean. More than that there are chairs and tables and papers and cards and lunch, and in many cases pool and billiards, while in some few well-equipped gymnasiums can be found which are free to patrons. What more does the workingman want for his club? He already has all that most clubs offer their members—papers and cards and food and drink and service—and being modest in his wants their quality satisfies him. But his demand for even these things is not fundamental, they are but means to his social expression. It is the society of his fellows that he seeks and must have."

While the social value of the saloon under existing conditions is insisted upon, its limitations and imperfections are by no means concealed. "That the saloon functions to certain social wants otherwise not supplied is our thesis. That its wares are poison is nowhere lost to sight, but that the poison appears in their abuse and not in their use is our contention. It is also admitted that social want is very inadequately supplied by the saloon. That a condition in which the idea can express itself in emotional terms only is essentially pathological. But it is believed that the saloon will continue to supply it as long as its opponents continue to wage a war of extermination against all that it represents, instead of wisely aiding social life to reach that plane where its present evils shall no longer be its accidents. The saloon is a thing come out of the organic life of the world, and it will give place only to a better form of social functioning. That a better form is possible to a fully conscious society no one can deny. When and what this form shall be remains for society's component units to declare. The presence of the saloon in an unorganized society is proof conclusive that society can wisely organize the need which it supplies.

"It is hardly necessary to enlarge further upon the evils of the saloon in a protest against the predominance of one-sided statements in that very particular. They are many and grave, and cry out to society for proper consideration. But proper consideration involves a whole and not a half truth, and the whole truth involves its own power of proper action. In the absence of higher forms of social stimulus and larger social life the saloon will continue to function in society, and for that great part of humanity which does not possess a more adequate form of social expression the words of Esdras will remain true: It is wine that 'maketh the mind of the king and of the fatherless child to be all one, of the bondman and of the freeman, of the poor and of the rich. It turneth every thought into jollity and mirth, so that a man remembereth neither sorrow nor debt; and it maketh every heart glad.'"

SCIENTIFIC VALUE OF SOCIAL SETTLEMENTS.

In the *American Journal of Sociology* for September, Mr. Herman F. Hegner discusses the "Scientific Value of Social Settlements." The settlement movement has grown rapidly of recent years; "there are now some seventy-five of these social clearing-houses, of which forty-five are in American cities. Eleven of these are in Chicago. * * * The settlement idea has taken firm hold of the universities, and, to some extent, of the churches, during these first fifteen years of its history, and the residents

of the different settlements, while they do not claim to rank among the prominent thinkers of the day, are widely recognized as those whose studies of social conditions, and experience in trying to find the most scientific method of accelerating social progress are of no small value. Their knowledge of what is actually occurring within society makes their conclusions as to the most natural methods of reform important. This knowledge is of double value because it comes from within the social stream itself, and because every community has its own individual problems, which differ more or less from the problems of every other community. The experiments of the different settlements will accordingly be modified by the problems of their neighborhoods, as will also their aims and methods." Expressions of opinion as to the best methods of settlement work are quoted from residents at Toynbee Hall, Hull House, Chicago Commons, University of Chicago Settlement, University Settlement and East Side House of New York, and the Philadelphia College Settlement.

In summing up the value of settlement work, Mr. Hegner says: "This function of the settlement as a social clearing house, where rich and poor, learned and ignorant, Catholic and Protestant, capitalist and laborer, can meet on common ground and find that they are all brothers after all, is the ideal for which the settlement stands. To discover the inside facts of a community, so as to co-ordinate and direct its social forces, is a work that gives satisfactory results and answers the demand for a scientific method. The settlement resident believes that the evolution of society is as much a process of nature as is organic evolution, and that a broad principle underlies all social processes. The practical and experimental development of this principle, in the spirit of humanity, will, perhaps, be the most valuable contribution of the settlement movement to the science of sociology."

VACATION SCHOOLS IN NEW YORK.

In the August number of the *Reviews of Reviews*, Mr. William Howe Tolman writes upon "Vacation Schools in New York." "The term of the vacation schools is six weeks, beginning the second week in July, and the school hours are from 9 to 12 each day, except Saturday. The schools are selected among the sections where the population is the most congested, for the sake of reaching those children most in need of the advantages of a vacation school." * * * Children are admitted from five to fifteen years of age, corresponding in grade from the kindergarten to the first grammar. The plan of work includes general exercises, singing, gymnastics, and nature-study for all the grades. No text books are used, but the exercises are so planned that what is best in the boy or girl is drawn out."

The following table indicates the growth of the vacation school movement:

"Year.	Registration.	Total Attendances.	Cost per Day each Child.	No. of Schools."
1894.....	2,100	28,000	11.7	3
1895.....	7,666	98,880	5.1	6
1896.....	5,762	101,009	4.9	6

The many other interesting features of this work, are described briefly in Dr. Tolman's article.

THE TENEMENT HOUSE REFORM IN NEW YORK CITY.

Under the above title, Mr. S. Parkes Cadman contributes to the September number of the *Chautauquan* an interesting account of the steps taken to bring about tenement house reform in New York City. He calls attention to the great density of population both in the whole city and especially in certain wards and blocks, and gives as the reasons:

"The peculiar geographical situation of New York City."

"The tremendous influx of foreign immigration, especially from Germany, Poland, the countries on the Mediterranean Sea, and Ireland. The immigrants arrive here, find their fellow-countrymen established in various parts of the city in colonies where their own language is more often heard than the English tongue, and where the habits and modes of life to which they have always been accustomed have just as free play as upon their native shores. Hence it is difficult to move them beyond the city limits."

Mr. Cadman notes the difficulties of the problem, but deals principally "with the work which has been done in bettering the condition of some of these densely crowded spots where crime, disease, and misery had their favorite haunts."

"The first work of the Tenement House Committee was to obtain recognition from the legislature of the state. They secured the necessary authorization and began their investigations with indomitable patience and perseverance."

"After the work of investigation was completed the following bills were obtained relative to immediate improvement: First, an act providing for a park at Mulberry Bend, one of the worst spots of the tenement house district. Scores of these houses were destroyed and a much needed breathing place was given for the greatly overcrowded neighborhood. To-day, hundreds of happy children are playing, or listening with their parents to the music of the band, upon the very spot where for fully fifty years every crime in the decalogue was committed, and many of them with impunity!

Three other acts were secured, providing for small parks and municipal bath-houses, the maintenance of open-air playgrounds in connection with public schools, and the better sanitary inspection of tenement house districts.

But the movement did not stop here. An association was formed to promote better housing and incorporated under state laws. Mr. Cadman gives an outline of the purposes of the company, and calls attention to the fact that improved tenements can be made to pay. A better day has certainly dawned.

THE CITIZENS' UNION PAMPHLETS.

The Citizens' Union deserves the thanks of all students of municipal government for the excellent series of pamphlets dealing with various civic topics which it is publishing. At the present writing, four numbers have been issued under the following titles: Public Baths and Lavatories, Clean Streets, More and Better Public Schools, and New York's Tenement Houses. There is little of the campaign document style about these papers, and for that very reason they will doubtless prove far more effective than the combination of abuse and lying statistics which is the principal ingredient of most partisan literature. Each of these little pamphlets contains a brief description of the best results obtained in the most progressive cities of the world in the way of public baths, clean streets or better housing conditions, as the case may be—together with a discussion of what is necessary to give Greater New York equal or superior facilities. Many striking illustrations and diagrams add greatly to the value of the text. No agency is better calculated to aid the cause of popular education in municipal affairs than these exceedingly valuable little pamphlets.

BIBLIOGRAPHICAL INDEX.

June–September, 1897.

(NOTE.—The following subject index is intended to continue the work begun in the first (March) issue of MUNICIPAL AFFAIRS, which was entirely devoted to a Bibliography of Municipal Administration and City Conditions. In the second (June) number an index covering the six months from January to June, 1897, was presented. So far as possible all books, pamphlets and magazine articles of interest to students of city government which have appeared during the last three months (June-September, 1897) are included in the following list. Future numbers of MUNICIPAL AFFAIRS will contain similar indexes covering the literature of each preceding quarter.)

PERIODICALS AND ABBREVIATIONS.

ALTRUIST, New York	Altruist.
AMERICAN ARCHITECT, Boston	Am. Arch.
AMERICAN ECONOMIC ASSOCIATION PUBLICATIONS, Baltimore, Md	Am. Econ. Assoc.
AMERICAN GAS LIGHT JOURNAL, New York	Am. Gas Light J.
(AMERICAN) JOURNAL OF SOCIAL SCIENCE, Boston	Am. J. Soc. Sci.
AMERICAN JOURNAL OF SOCIOLOGY, Chicago	Am. J. Sociol.
AMERICAN LAW REVIEW, St. Louis, Mo	Am. Law R.
AMERICAN MAGAZINE OF CIVICS, New York	Am. M. Civics.
AMERICAN STATISTICAL ASSOCIATION PUBLICATIONS, Boston	Am. Statis. Assoc.
ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE, Philadelphia	Ann. Am. Acad. Pol. Sci.
ARCHITECTURAL RECORD, New York	Arch. Rec.
ARCHITECTURAL REVIEW, Boston	Arch. Rev.
ARCHITECTURE AND BUILDING, New York	Arch. & Buil.
ARENA, Boston	Arena.
ATLANTIC MONTHLY, Boston	Atlan.
BANKER'S MAGAZINE, London	Bank. M. (London.)
BANKER'S MAGAZINE, New York	Bank. M (N. Y.)
BIBLIOTHECA SACRA, Oberlin, O	Bib. Sacr.
BLACKWOOD'S MAGAZINE, Edinburgh	Blackw.
CANADIAN MAGAZINE, Toronto	Canadian M.
CENTURY, New York	Cent.
CHARITIES REVIEW, New York	Char. R,
CHAUTAUQUAN, Meadville, Pa	Chaut.
CITIZEN, THE, Philadelphia	Citizen.
CITY AND STATE, Philadelphia	City & State.
CITY GOVERNMENT, New York	City Govt.
COMMONS, THE, Chicago	Commons.
COMMONWEALTH, New York	Commonw.
CONTEMPORARY REVIEW, London	Contemp.
COSMOPOLITAN, New York	Cosmopol.
DIAL, Chicago	Dial.
DUBLIN REVIEW, London	Dub. R.
ECLECTIC MAGAZINE, New York	Ecl. M.
ECONOMIC JOURNAL, London	Econ. J.
ECONOMIC REVIEW, London	Econ. R.
EDINBURGH REVIEW, Edinburgh	Ed. R.
EDUCATIONAL REVIEW, New York	Educa. R.
ELECTRICAL ENGINEER, New York	Elec. Eng.
ELECTRICAL ENGINEERING, New York	Elec. Engng.
ELECTRICAL REVIEW, New York	Elec. Rev.
ELECTRICAL WORLD, New York	Elec. World.
ENGINEERING MAGAZINE, New York	Engin. M.

ENGINEERING NEWS, New York.....Engin. News.
ENGINEERING RECORD, New York.....Engin. Rec.
FIRE AND WATER, New York.....Fire and Water.
FORTNIGHTLY REVIEW, London.....Fortn
FORUM, New York.....Forum.
GARDEN AND FOREST, New York.....Garden & F.
GOOD GOVERNMENT, New York.....Good Govt.
GUNTON'S MAGAZINE, New York.....Gunton's M.
HARPER'S MAGAZINE, New York.....Harper.
HARPER'S WEEKLY, New York.....Hrprs. Wkly.
INTERNATIONAL REVIEW, New York.....Internat. R.
JOHNS HOPKINS UNIVERSITY STUDIES IN HISTORY, etc., Baltimore, Maryland.....J. H. Univ. Studies.
JOURNAL OF THE ASSOCIATION OF ENGINEERING SOCIETIES, Philadelphia.....J. Assoc. Engin. Soc.
JOURNAL OF THE FRANKLIN INSTITUTE, Philadelphia.....J. Frankl. Inst.
JOURNAL OF POLITICAL ECONOMY, Chicago.....J. Pol. Econ.
JOURNAL OF THE STATISTICAL SOCIETY, London.....J Statis. Soc.
KINDERGARTEN MAGAZINE, Chicago.....Kindergarten M.
LESLIE'S WEEKLY, New York.....Leslie's Wkly.
LIBRARY JOURNAL, New York.....Lib. J.
LIPPINCOTT'S MAGAZINE, Philadelphia.....Lippinc.
LONDON, London.....London.
LONGMAN'S MAGAZINE, London.....Longm.
MACMILLAN'S MAGAZINE, London.....Macmil.
MCCLURE'S MAGAZINE, New York.....McClure's.
MERCHANTS' ASSOCIATION REVIEW, San Francisco, Cal.....Mchts. Assoc. Rev.
MUNICIPAL ENGINEERING, Indianapolis, Indiana.....Mun. Engin.
MUNICIPAL RECORD AND ADVERTISER, New York.....Mun. Rec. & Ad.
MUNICIPAL WORLD, St. Thomas, Ont.....Mun. World.
MUNICIPALITY AND COUNTY, Buffalo, N. Y.....M. & C.
MUNSEY'S MAGAZINE, New York.....Munsey's.
NATION, New York.....Nation.
NATIONAL REVIEW, London.....National.
NEW ENGLAND MAGAZINE, Boston.....New Eng. M.
NEW REVIEW, London.....New R.
NEW TIME, Chicago.....New Time.
NINETEENTH CENTURY, London.....19th Cent.
NORTH AMERICAN REVIEW, New York.....No. Am.
OPEN COURT, Chicago.....Open Court.
OUR COUNTRY, New York.....Our Country.
OUR DAY, Boston.....Our Day.
OUTLOOK, New York.....Outlook.
OVERLAND MONTHLY, San Francisco, Cal.....Overland.
PARK AND CEMETERY, Chicago.....Park & Cem.
POLITICAL SCIENCE QUARTERLY, New York.....Pol. Sci. Q.
POPULAR SCIENCE MONTHLY, New York.....Pop. Sci. Mo.
PROGRESSIVE AGE, New York.....Prog. Age.
PUBLIC OPINION, New York.....Pub. Opin.
QUARTERLY JOURNAL OF ECONOMICS, Cambridge, Mass.....Q. J. Econ.
QUARTERLY REVIEW, London.....Quar.
RAILROAD GAZETTE, New York.....Railroad Gaz.
REAL ESTATE RECORD AND GUIDE, New York.....Real Estate Rec. & G.
REVIEW OF REVIEWS, New York.....R. of Rs.
REVUE DES DEUX MONDES, Paris.....Rev. d. deux Mondes.
REVUE DES REVUES, Paris.....R. des Revues.
REVUE BLEU, Paris.....Rev. Bleu.
SANITARIAN, Brooklyn.....Sanitarian.
SANITARY RECORD, London.....San. Rec.
SATURDAY REVIEW, London.....Sat. R.
SCIENTIFIC AMERICAN, New York.....Sci. Am.
SCIENTIFIC AMERICAN SUPPLEMENT, New York.....Sci. Am. Sup.
SCRIBNER'S MAGAZINE, New York.....Scrib. M.
SPECTATOR, London.....Spec.
STREET RAILWAY JOURNAL, New York.....St. Ry. Jour.
STREET RAILWAY REVIEW, Chicago.....St. Ry. Rev.
TRANSACTIONS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS, New York.....Trans. Am. Soc. Civ. Engrs.
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BIOGRAPHICAL NOTICES

OF THE

WRITERS IN MUNICIPAL AFFAIRS FOR SEPTEMBER, 1897.

JOHN DEWITT WARNER, Counsellor-at-Law, 111 Broadway, New York City. Born Oct. 30th, 1851, in Schuyler Co., N.Y. Lived in Yates County, New York, until 1868. Entered Cornell the first day it opened. Graduated 1872. Edited Ithaca *Daily Leader* three months; was Professor of Latin, German and Elocution two years at Ithaca Academy, and two years at Albany Academy. Studied Law at Albany Law School, whence graduated and was admitted to the bar, June, 1876. Member Albany Greek Club and Albany Institute, which published his "Solar Theory of Myths." Came to New York after 1876, where has since practiced law as member of firms, first Iselin & Warner, Warner & Frayer, and at present of Peckham, Warner & Strong. A Democrat in politics and campaign speaker for his party since 1888. Elected to the Fifty-second Congress from the greatest manufacturing district of America, and returned to the Fifty-third Congress from a new district comprising part of his old one, and this time the wealthiest parliamentary constituency in the world. In Congress was Chairman of the House Sub-committee to investigate the sweating system. Took an active part in the repeal of the purchasing clause of the Sherman Act and Federal Election laws, and in the passing by the House of the Wilson Tariff bill, to which he secured the "free sugar" amendment. Strenuously advocated the Torrey Bankruptcy bill and opposed the Bland Seignorage bill. Secured investigation of Federal building matters at New York, which has resulted in important reforms and large appropriations for construction and repairs. In the Fifty-third Congress was the sole representative for New York State and city on the House Committee on Banking and Currency, and a leader in debate in both the Fifty-second and Fifty-third Congresses on tariff, financial and commercial matters. In the Fifty-third Congress was prominent in leading the fight for free sugar, and especially in exposing the Sugar Trust. Took a leading part in the discussion of the repeal of the ten per cent. tax on State Bank issues, and led in opposition to the Anti-option bill. Mr. Warner was prominent in agitation for reform in Cornell University matters, and was elected Alumni Trustee in 1882 and again in 1894, in each case for a five-year term. One of the founders of Shakespeare Club of New York City, and author of "Sound Sequence in Shakespeare" and other papers on Shakesperian subjects. A writer and speaker on tariff reform; was one of the founders of New York Reform Club; author of numerous pamphlets on tariff matters, and Tariff Reform Editor of New York *Weekly World* during campaign 1892; Chairman Reform Club's Tariff Reform Committee, 1889–1891; Chairman Reform Club's Sound Currency Committee 1895–1896; President of the Reform Club and Chairman of its Committee on Municipal Administration 1897. Has done extensive editorial work in connection with a number of periodicals, and has been contributor to many more, including *Die Zeit*, of Vienna; *Law Times*, of London; the *Century*, *Forum*, *Harper's Weekly* and numerous political, financial and economic periodicals.

EDWARD E. HIGGINS. Born in Chelsea, Mass., April 4, 1864. Educated in Massachusetts public schools and at the Massachusetts Institute of Technology, from which the degree of Bachelor of Science in Electrical Engineering was obtained in 1886. From 1888 to 1893 he was actively engaged in the commercial and engineering development of electric railways; in 1893 he entered upon independent consulting work as expert in street railway values and economies; and in 1894 became editor of the *Street Railway Journal and American Street Railway Investments.* Mr. Higgins has written largely upon subjects connected with street railway management and finance, usually in the columns of the *Street Railway Journal.*

ROBERT C. BROOKS. Born in Piqua, Ohio, February 7th, 1874. Educated in the public schools of Cambridge City, Indiana; graduated from the Cambridge City High School in 1890; and from the department of economics and social science at Indiana University in 1896. Editor of *Municipal Affairs* and secretary of the Reform Club Committee on Municipal Administration, 1896–7. Resident at the University Settlement, New York, 1896–7. Published "A Bibliography of Municipal Administration and City Conditions" (New York, Reform Club, 224 pp.), in 1897. Elected to the President White Fellowship in Political and Social Science at Cornell University for 1897–8.

GENERAL EDWARD C. O'BRIEN. Born in Fort Edward, Washington County, New York, April 20, 1860. Educated in the public schools and at the Granville Military Academy. In early life, engaged in the commission flour trade. In 1891 appointed by President Harrison United States Commissioner of Navigation. Was commended by maritime journals and shipping men generally for his administration of the office and his reports on American shipping. Resigned in December, 1893. Received the thanks of President Harrison and Secretary Blaine for his satisfactory settlement of the celebrated tonnage rate dispute with Norway and Sweden. In 1895 appointed by Governor Morton Commissary General of Subsistence with the rank of Brigadier General. In March, 1895, appointed Commissioner of Docks by Mayor Strong, at the request of a large number of business men. Three times elected President of the Board. Applied himself immediately to securing enlarged improvement of the water front. Obtained the adoption by the Sinking Fund Commissioners of plans for extensive dock improvements between Charles and West Twenty-third streets. In May, 1897, obtained from the Secretary of War permission to extend the pier head line in the North River by which 4,200,000 square feet was added to the wharfage room of the city. In June, 1897, was honored by Georgetown University with the degree of LL.D. Is one of only fifty similarly honored by Georgetown since it was founded in 1788. In 1895 was chairman of the first annual convention of the International Deep Waterways Convention in Cleveland. Is New York's representative on the Executive Board of the Association. Is a member of the Executive Committee of the Canal Men's Union, and organized the monster Cooper Union mass meeting in 1895 in favor of the improvement of the canals. Has taken a deep interest in everything pertaining to the use of waterways for commerce. Is a member of the Maritime Association, the Board of Trade and Transportation, the Union League Club, and several other clubs and business associations.

GEORGE E. WARING, Jr. Born in Poundridge, N. Y., July 4th, 1833. Educated at College Hill, Poughkeepsie and then studied agriculture with James J. Mapes. In

1855 he took charge of Horace Greeley's farm at Chappaqua, N. Y., which he conducted on shares for two years. Appointed drainage engineer of Central Park, New York City, in 1857. Remained in this position four years, during which time he prepared the soil of the Mall and set out the four rows of elms on it. After the opening of the civil war he was appointed major of the Garibaldi Guard with which he served three months. In August, 1861, he was made major of cavalry by Gen. John C. Fremont. He was commissioned colonel in 1862 and served the remainder of the war in this capacity, chiefly in the southwest After the war Colonel Waring devoted himself to agriculture and cattle breeding until 1877. Since that time he has been in active practice as an engineer of drainage, He was appointed in June, 1879, expert and special agent of the 10th census of the United States with charge of the social statistics of cities. He has been a member of the National Board of Health since 1882. During the present administration of the City of New York, Colonel Waring has been Commissioner of Street Cleaning, in which capacity his work is too widely and favorably known to require description here. He has invented numerous sanitary improvements chiefly in connection with the drainage of houses and towns and has written a number of articles and books on agriculture and sanitation.

EDWARD MUSSEY HARTWELL. Born May 29, 1850, at Exeter, New Hampshire. He passed his boyhood mostly at Cincinnati, Ohio, and Littleton, Massachusetts. He graduated in 1869 from the Boston Latin School ; in 1873 from Amherst College (A.B.) ; in 1881 from the Johns Hopkins University (Ph.D.) ; and in 1882 from the Miami Medical College, Cincinnati, Ohio, (M.D.) After graduation from college, he was a teacher in the High School, Orange, N. J., 1873–74 ; and the Boston Latin School 1874–77. In 1879–80 was a Fellow in Biology of the Johns Hopkins University, where he served as Instructor and Associate in Physical Training, 1888–1891. From January, 1891, to September 1, 1897, he was Director of Physical Training in the Public Schools of Boston. On September 1, 1897, he assumed the duties of Secretary of the Department of Municipal Statistics of the City of Boston. He has studied abroad both as a private student in Vienna, Berlin and Stockholm, and as special agent of the United States Bureau of Education and of the United States Department of Labor. He has written numerous pamphlets and reports upon physical training and school hygiene, and has contributed statistical studies to the publications of the United States Department of Labor and of the American Statistical Association. His most recent paper is entitled "Public Baths in Europe," and was published in the Bulletin of the Department of Labor, July, 1897.

MUNICIPAL AFFAIRS.

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PUBLIC CONTROL, OWNERSHIP OR OPERATION OF MUNICIPAL FRANCHISES?

WITH SPECIAL REFERENCES TO ELECTRIC LIGHTING.*

By R. R. BOWKER.

A modern municipality is at once a small state or body politic, and a great corporation or co-operative business. In emphasizing its functions as a business, its limitations as a government must be not less emphasized. If that government is best which governs least, the public should not undertake what private enterprise can do as well. The "government of the people, by the people and for the people" of Lincoln, truest of democrats, meant a democratic republic, not a populistic socialism. If the trend of the municipalization of industries makes toward socialism in the state, there is reason for caution.

It is recognized by most thinkers that the social increment belongs to the people. The public, and not private interests, should benefit from the increased values directly caused by the growth of a great city. This does not involve socialism or the municipalization of industries. It does demand that franchises should not go out of the people's hands without limits as to time, safeguards as to price and adequate power of control.

*This paper is written from the point of view of the economist and citizen, but with the data and experience gained as the executive of the New York Edison Company. To my mind, this should not involve opposition of interests; as he most serves his party who best serves his country, so he most serves the interest of a public-service company who best serves the public. I mention the relationship, however, to forewarn readers of any unintentional bias. It is difficult for any outside the businesses cited, in an academic discussion, to obtain real bases of comparison.

DEVELOPMENT OF MUNICIPAL INDUSTRIES.

The private or toll road, the well or spring, the private cistern, the tallow dip or oil lamp develop in a modern city into great public needs which can be handled only in an organized way. Among the facilities answering to such needs are streets, sewers, the supply of pure water for drinking and for steam, and of salt or other water for flushing and for fire use, lighting by gas or electricity, telegraph and telephone communication, the supply of power through conduits, street transportation—surface, elevated or underground—pneumatic tubes and postal, messenger or parcels service.

Good roads, it is conceded, must be provided by the commonwealth, as also sewerage; water supply is usually, though not always, considered a municipal function; lighting, communication and transportation are on debatable ground; there are few in this country who approve public bakeries or store-houses, although bread is a necessity of life. Somewhere within this range is the point where democracy becomes socialism. It is important to limit the function of the municipality at that point, and not to be misled by the phrase that "a city is a business corporation."

There is no longer any question of the legal right of a municipality in these days to enter almost any field of public supply. Practice has made abundant precedent, and repeated decisions of the Courts, culminating in the Rapid Transit decision of the New York Court of Appeals, has settled beyond doubt the legal right of municipalities to invest in and operate what may be called municipal industries. Indeed, so far has practice gone, as in actual cases where electric lighting has been supplied to private consumers below cost at the expense of taxpayers in general, that it is difficult to apply the limiting decision of the United States Supreme Court in the Topeka case that "there can be no lawful tax which is not laid for public purposes." The real limits of municipal activity must be found in an alert and wholesome public opinion which will prevent steps that lead by easy reaches into socialistic enterprises, pure and simple.

NATURE OF MUNICIPAL FRANCHISES.

A municipal franchise is generally understood to mean a freedom or privilege granted by a municipality giving to companies or other private persons the use of public property or facili-

ties, as of the streets, for the supply of conveniences or commodities to its citizens. The phrase has come to mean indeed an industry for which a franchise would be needed, and has been applied even when such an industry is operated by the municipality. Too often a franchise has been a free gift to private persons; but it is now conceded that such privileges should involve adequate return to the public. This may be made either by reduction in price, giving advantages directly to those citizens who are consumers, or through payment to the municipality of taxes, license fees, royalties on output or gross returns, or share of surplus profits, which last is perhaps the best way because it does not increase or tend to keep up price, but does offer to a supply company an inducement both to enterprise and economy. It does not matter to a gas supply company, for instance, whether the price to consumers is $1.25, out of which 25 cents is paid to the city, or is $1 to consumers direct. On the contrary, it does matter to taxpayers, when a municipal corporation operates an industry, whether the price to consumers is made at or below cost. While in case of profit the citizens generally reap the benefit through the municipality, in the case of loss they have to pay their quota, through taxes, for the benefit of those citizens who as consumers have had their supply at less than cost. In private companies this result of miscalculation or bad management falls only on those who as share-holders have deliberately taken risk.

Franchises to supply public needs are often generalized as monopolies, but a distinction should be drawn. The postal service of the government is a monopoly and an artificial monopoly, because the law makes competition a penal offence. At the start the well and the private cistern may exist alongside the general water supply and sewerage system, but as a town grows into a city the board of health must intervene, and water and sewerage become practically monopolies. Railroads, telegraph and telephone lines are not in themselves monopolies (except as the telephone system is founded on exclusive patents), for it is chiefly because of the public value of an extended and centralized system that new or lesser competitors have little chance. Lighting is not a monopoly because gas and electricity have oil, as well as each other, for competitors; and an electric company must also compete with private electric plants—which prevents extor-

tionate prices by what economists call substitution use. It is only when the use of the streets is given to one company or private person as against all others, that there exists a real monopoly in such service.

DISTINCTIONS AMONG INDUSTRIES.

The real key to what is usually called a municipal industry is in this fact: As the whole arterial system of the human body radiates from one central supply station, the heart, so the supply of water, gas, electricity, telephone communication, etc., in a great city, to be constructed and operated at best advantage and at least cost, must radiate from one or more central sources of supply, using the streets as arteries. Here competition involves duplication of investment, increased waste, multiplication of operating expenses, in short, economic loss instead of gain. A unified street railway system with its advantages of transfer has the same economic advantage over independent lines. The inevitable trend in all these cases is, therefore, toward consolidation instead of competition. It is often cheaper to throw parallel systems out of use than to continue the waste of double operating. Competition, in such cases, does not act to reduce price, except by the cut-throat competition of rate-cutting, which involves a final loss instead of a public gain. If three gas mains exist where but one is needed, there is three times the investment cost and three times the operating expenses; costs, and therefore prices, are higher; and in the end, usually one system survives, and the other two are dead loss. The limitation of price, therefore, must be brought about, in private operation, not from competition but by the application of sound business principles on the part of those controlling the industries or by the exercise of the power of municipal regulation in connection with the use of the public streets.

A distinction is to be made between the distribution of natural products and the manufacture of artificial products. Water supply is the distribution of a natural product. There is no manufacture, unless pumping and filtration be so considered. The production of gas or electricity is, on the contrary, a most complicated process of manufacture, especially requiring skilled labor and directive ability. Co-operative production has failed more than once where co-operative distribution has succeeded; and here, perhaps, should be one line of division between municipal and private enterprise.

Another distinction is to be drawn between free and commercial service. The streets are free. Sewerage is free. Water supply is partly free and partly paid for in water "rates" or taxes, especially by large consumers, directly according to metered consumption. Street lighting is free, commercial lighting is individually paid for; but each costs less to produce or distribute when combined with the other. Possibly the line of municipalization should be drawn at supplies which are wholly or chiefly free.

A line is sometimes drawn at necessaries of life. Air is a first necessary of life, and the limitation by law of the height of buildings may be required to prevent dangerous fouling of air in the streets and lower stories. Water is a necessary of life and is supplied usually though not always, by the municipality. Food is always a necessary of life, heat and clothing are necessaries in most climates; nevertheless, these are not considered, except by extreme socialists, as properly included under municipal functions. Lighting is a convenience, almost, but not quite, a necessary of life. Transportation is a convenience, but scarcely a necessity. It does not seem that this line of division has real bearing.

Clear thinking is most necessary in distinguishing between public control, public ownership and public operation. Public control involves inspection and regulation, but not necessarily ownership or operation. Public ownership may involve the ownership of the distributing system only, for which the public highways must be used, or of the manufacturing plant also—a distinction most important, though seldom emphasized. Public operation means the actual administration, as a productive business, of both manufacture and distribution. It is important to keep these distinctions in mind in considering the status in respect to public services in the great cities of the world.

VARIANTS IN COMPARATIVE STATISTICS.

In such a comparison of industrial services, several classes of variants must be taken into account—as between industries, as between localities, as between complete or imperfect statistics and as between different methods of statement. Most of the tabulated returns put forward by those not acquainted with the respective industries furnish no real basis of comparison and are misleading. In England, however, the Board of Trade requirements afford a basis of comparison more nearly adequate, and it is gratifying that

the United States Bureau of Labor is entering upon a careful comparison in the lighting industries, which has been planned to cover very nearly all the variant conditions.

As to variants between industries: Water can be stored cheaply for use at any time and suffers no loss except a slight evaporation and leakage. Gas supply for ten hours can be stored cheaply, with perhaps 10 per cent. loss in gasometer storage and in distribution through mains. The price is, therefore, usually the same to all consumers and at all hours. Electricity must be produced at the instant of demand, unless stored at a loss of 25 per cent. in costly storage batteries. Of the generating machinery required at the hours of maximum use, a quarter is utilized less than one hundred hours in a year, and the loss in transmission reaches from ten per cent. to nearly forty per cent., the last on alternating systems which energize house converters through the whole twenty-four hours. The price, therefore, differs greatly with the conditions of supply, and electric current can profitably be supplied through ten hours at a third the price charged for the "maximum" two hours. Street cars and suburban trains are chiefly in demand morning and evening. The telegraph can defer part of its business as night messages; but the telephone must instantly supply each demand and, contrary to most other industries, the operating cost in a large system is greater than in a small one, since a "central" of 50 subscribers need make but 2,500 combinations, while one with 5,000 subscribers must provide for 25,000,000 combinations at greatly increased cost. Even within city limits the cost of service is somewhat greater with distance, but it does not seem fair that a consumer to whom the source of supply is not near should be charged more than one close by, and in American cities street car fares as well as gas and electricity charges are usually generalized into a uniform rate. In the early days of postal facilities a pony express letter to San Francisco was a costly affair, but a two cent stamp now carries a letter either across the street in New York or across the continent to San Francisco.

As to variants between localities: The density of population, not only in a city, but in the area supplied, is an important variant in cost. Fuel and water costs vary greatly. In New York hard "pea" coal costs about $3 delivered, or $2.50 "alongside" dock; in Chicago soft factory coal is delivered to riverside

factories at about $1.10. Some western cities use natural gas or oil. Ratings are different in different localities, as in the candle power of gas and even in the definition of candle power, which is different on the Continent from that in England and America. In London electric incandescent lamp "equivalents" are usually based on the eight-candle-power lamp; in Paris, on the ten-candle-power lamp; in Berlin and American cities, on the sixteen-candle-power lamp. European prices for electric lighting usually do not cover the installation and renewal of incandescent lamps, American prices usually include them. The standard arc-lamp of 425 watts in the arc or 450 watts at terminals (10 amperes of 45 to 50 volts) is nominally of "2,000 candle-power"; but this lamp is spoken of in the New York contract as of "at least 1,000 candle-power," and entered in National Electric Light Association returns as "1,200 candle power"; while the high-tension arc light rated in Brooklyn as 1,200 candle power is of 325 watts or 7 amperes. Overhead supply is much cheaper than subway supply, the New York rentals equalling $40 to $50 per lamp where street lighting only is supplied. Some of these latter variants are really variants in terminology, that is, in the different use of words or names in different places.

There are usually many variants in the comparisons, especially tabulated comparisons, between municipal returns and those of private corporations. A private corporation pays taxes and a municipal industry does not. Interest, maintenance and depreciation charges are often overlooked in municipal industries. Legal charges are usually in municipal industries charged to the corporation counsel's office and not to the industry. General expenses, such as auditing, and the cost of the central administration of the city, are commonly among the many forgotten elements in municipal accountings. The return of the private corporation to the state or city in indirect ways is usually not credited in such comparisons. In Paris, for instance, the price of gas should be considered for comparison as $1.35 per thousand cubic feet, because 28.6 cents of the price—$1.64—is paid back to the citizens through the municipality or the national taxes.

A company supply cannot be compared with municipal supply unless the charter also is for an entire city exclusive and permanent, as is usual under municipalization and is possible, under proper safeguards, in chartered companies.

MUNICIPAL INDUSTRIES IN THE GREAT CITIES.*

The pages following give the facts and figures as to municipal industries in the great cities of the world, chiefly as to lighting, but with reference also to other industries, when the experience is significant or distinctive:

PARIS.†

Paris has its gas supply exclusively from a private company, the Compagnie Parisienne, resulting from a consolidation a generation ago, covering the city and suburbs under an exclusive concession given in 1855, and extended under the contract of February 7, 1870, through 1905. This had in 1896, in addition to 93,044 burners for public lighting, 347,295 customers; the year's consumption was 318,020,060 cubic meters and the receipts from sale of gas 80,876,336 francs. Under the contract with the municipality, its price to private consumers is 30 centimes per cubic meter ($1.64 per thousand cubic feet) and to the city half that rate. In 1896 it paid to the city 5,470,187 fr. in royalties of 2 centimes per cubic meter sold, 200,000 fr. for sub-soil privileges, 8,800,000 fr. as half of its surplus profits, in addition to 1,235,002 francs for expenses in the maintenance and care of street lamps—in all 15,705,189 fr.; and to the state in various taxes, 1,095,720 francs; together, 16,800,910 fr., or the equivalent of 5.3 centimes per cubic meter, or twenty per cent. of its total receipts from sale of gas. Thus out of $1.64 charged per thousand cubic feet, 28.6 cents is returned to the city of Paris in a tax actually paid by the gas consumer, without which the price would be $1.35 per thousand cubic feet. The Compagnie Parisienne has issued 336,000 shares of 250 fr., of which it has amortized 188,513, leaving 147,487 shares (or $7,374,350) present share capital; it has issued 553,332 obligations of 500 fr., of which it has amortized 237,136, leaving 316,916 bonds (or $31,619,600) outstanding. It has paid five per cent. on its bonds and in 1896 the enormous dividend of 26 per cent. on its stock, an extraordinary showing of what can be done by a private company occupying an exclusive field in a great city.

Paris has six electric lighting companies, each occupying a

* Round numbers are given, except when from official reports or where exact figures have value. The franc (United States Government exact value 19.3 cents) is reckoned at 20 cents; the German mark (23.8 cents) and the English shilling (24.3 cents) at 24 or 25 cents; the pound sterling ($4.866) at $5 The American cent is practically equal to 5 centimes or 1 sou French, 4 pfennigs German and one-half-penny English. The cubic metre is equivalent to 35.30 cubic feet; a square metre to 10.76 square feet or to 1.20 square yards; and the metric tonne (1,000 kilogrammes) to 2,204.6 lbs. or nearly our long ton of 2,240 lbs. The electrical "unit" in general use, known in England as the Board of Trade unit, is the kilowatt hour (1,000 watts), equal to 1 1/3 horse-power, and supplying current for approximately 20 high efficiency 16-candle-power incandescent lamps, or 2 standard arc lamps. The French also use the hektowatt (100 watts), or one-tenth this. Candle power is a somewhat indefinite term, and the English and American standard is much lower than the Continental standard.

† "L'Eclairage à Paris" par H. Marechal (Baudry, 1894); Traité avec la Compagnie Parisienne du Gaz, 7 Fév. 1855 (Aureau. 1877); Rapport 1897 Compagnie Parisienne, *Le Gaz*, 15 Av. 1897; Exposé a propos de prolongation des sociétés d'electricité, par Ch. Bos (Conseil Municipal, No. 101, 1897); Supplement Statistique, *L'Industrie Electrique*, 25 Jan., 1897.

"secteur" of the city under a municipal concession for 18 years expiring in 1907-8, and a small municipal plant in the central market house. These seven systems supply 744 street and 7,056 commercial arc lamps and 416,000 incandescent lamps (chiefly 10 and 16 candle power) and there are 4,000 arcs and 286,900 incandescent lamps on private plants, making a total electric installation for all Paris of 11,800 arc and 702,900 incandescent lamps. There are but 500 electric motors in all Paris, power being supplied largely by compressed air. The municipal contract limits the price to 15 centimes per hektowatt hour (30 cents per unit) for lighting and 6 centimes per hektowatt hour (12 cents per unit) for power purposes. The average price is about 11 centimes per hektowatt hour without lamps, somewhat above the American maximum price of one cent per 16 candle power lamp, which includes lamps. The six private companies have a share capital of 48,000,000 francs and obligations of 15,500,000 francs, and one company has a floating debt exceeding 30,000,000 francs. Three of the companies pay five, and one four per cent. dividend; one has never paid dividends, and one is just beginning.

The electric light companies have recently petitioned the municipality to extend these concessions for a further period of 25 years, and M. Charles Bos, a member of the Municipal Council, has presented (1897) a most careful and valuable technical report on this question. He states that the present price of electric current is practically equal to the price of gas burned in the ordinary way. The distributing system in Paris is chiefly under the sidewalks and the city retains the right to take over this "canalization" at a fair valuation. The city charge for replacing pavement is stated at 8 fr. per square meter ($1.30 per square yard) for stone on concrete and 16 fr. ($2.60 per square yard) for asphalt, and for sidewalks 5 to 6 fr. per square meter. M. Bos states the cost of coal in Paris at 32 fr. per ton, in Berlin at 21.5 fr. and in London at 24 fr.

Paris also includes in its sub-soil system ducts for compressed air for power purposes, and a pneumatic service for postal purposes. The telephone system in Paris is in the hands of the government and is much behind the age; until recently calls were made by the name and address of the subscriber.

Outside of Paris there are recorded in the French cities and towns, 28 municipal and 378 company plants, now very important.

*BERLIN AND OTHER GERMAN CITIES.**

Berlin has a municipal gas plant supplying the city except in the central district which is supplied by a gas company organized in 1825 by English capitalists, whose charter proved to be an ex-

* Die Berliner Elektrizitäts werke bis ende 1896, von G. Kemman (Springer, 1897); Die öffentlicke Beleuchtung von Berlin, von Dr. H. Lux, (Fischer, 1896); Berichte Berliner Elektrizitäts Werke; *Elotktrotechnische Zeitung*, 1 Juli, 1897; Technischer Führer von Budapest, von A. E. Illes (Patria, 1896).

clusive and perpetual privilege for the heart of the city. The municipal plant produced in 1895–96, 86,213,953 cubic metres, and the private company 31,528,804, together 117,742,757 cubic metres. The municipal price is 16 pfennigs per cubic metre ($1.08 per 1,000 cubic feet) for lighting and 10 pf. (67c.) for heating, and the price from the private company is 15.2 pf. ($1.02) for lighting and 9.5 pf. (64c.) for heating, the private company having kept its price 5 per cent. below that of the municipal supply.

Berlin has but one electric lighting company, the Berliner Elektricitäts Werke. which had in 1896–97 4,067 customers, 196,076 incandescent lamps, 196 street and 8,977 commercial, a total of 9,173 arc lamps, and 7,475 horse-power in motors, etc. It delivered in the year, 14,200,000 units and had gross receipts from current of 5,134,300 marks, nearly $1,280,000. It paid to the city under its contract 513,430 marks, being 10% on the returns for current, etc., and 273,948 marks, being 25% of its surplus profit above 6% dividend, together 787,378 marks ($186 000) exclusive of taxes. It also paid into a reserve fund required by law 112,083 marks, into two employees' benefit funds 93,750 marks, and a dividend of 12½% on the share capital. The base price is 3 pf. (¾c.) per 16-candle power lamp hour without lamps, being 15 cents per unit, and for power 16 pf. (4c.) per unit. Lamps are supplied at an additional charge of 5 marks ($1.20) per 16 c. p. lamp per year. On incandescent light discounts are allowed of from 5 to 25% according to the number of hours' use of the lamps, and in addition from 5 to 20% according to the total amount of current consumed. The average return of the Berlin Company for all services, including a supply of current for three lines of electric railways, is about 9 cents per unit. In addition to the company service, there are 348 private plants with 3.690 arc and 85,000 incandescent lamps. Berlin also has a "blow post" subsoil service in connection with its post office and a governmental telephone service, which, like that of Paris, is much behind the times.

Outside of Berlin there are in German cities and towns 207 company and 41 municipal plants, the leading examples of the latter being in Frankfort, Dressden, Hanover, Dusseldorf, Cologne, Nuremberg, Bremen, and now in Munich. Vienna has had a gas company, organized by English capitalists, but the socialist power known to us under the mask of anti-Semitic agitation has carried the point of erecting an operating plant, without taking over or making allowance to the gas company for its existing works, a striking example of municipal confiscation. Electric lighting is supplied by five or more private companies, one of these having one of the largest stations in the world on the banks of the Danube. Buda Pest is supplied by two electric lighting companies, one distributing

high-tension and one low-tension current, and is especially noteworthy for its handling of the transportation question, having a trolley line operated by a private company through underground ducts, the first important installation of its kind, and a rapid transit tunnel electric railway operated by the same company.

*LONDON.**

London does not own its water front, except along the "embankments" made during the past generation, and its magnificent system of docks is the work of several different corporations, one of which has a capital of £5,000,000.

London receives its water supply from eight private companies, the oldest, dating from 1608, and one other taking water from the river Lea, a third from chalk pits in the hills of Kent, the other five from the upper Thames, filtering the water through large settling pools. Water rates based on rental value must be paid by the tenant in advance; the house-owner must lay the pipes communicating with the mains, except for houses renting under $50 per year, for which the company must on request furnish service pipes, charging for them an additional annual charge, in which case the owner is responsible for the water rates. The London County Council desires to take over the water supply, but bills have so far failed because of disagreement as to compensation. The Board of Works, and now the County Council, has safeguarded the interest of the public; no addition to share capital has been allowed since 1878, and the interest on debentures has since 1894 been limited to a rate that in the judgment of the Governor of the Bank of England would secure issue at par. The companies cannot pay more than ten per cent. dividend except to make up lower previous dividends; the actual rate has ranged from 5 to 12½ per cent., and the price of the stock ranges from 150 to 420, reducing the actual return to from 2⅞ to 3⅓ per cent. on present investment value. Any surplus must be invested as a reserve fund in the hands of the City Chamberlain.

London is supplied with gas from three private companies, under close government regulation. The price is from 2s. 5d. to 3s. 6d. (58 to 84 cts.) per thousand cubic feet of gas giving fifteen candle power in a five-foot burner. Meters are tested by County Council officials at a charge of from 6 pence (12 cts.) to three shillings (72 cts.) or more, for which the gas company pays if the meter is innacurate and the consumer if it is accurate.

London has ten electric lighting companies and four vestry municipal plants, occupying under "Provisional Order" charters, specified districts of London, in some cases exclusive, in other

* Whitaker's Almanac, 1897; Dickens' Dictionary of London, 1897; *The Electrician*, Supplement, 29 Jan., 1897; *Lightning*, 25 Mar., 1897; Electricity up to Date, by J. B. Verity (Warne, 1896).

cases with two companies in competition. The price is limited by the Board of Trade to a maximum of 8 pence (16 cts.) per unit. In practice the base rate of the companies varies from 8 pence (16 cts.) to 6 pence (12 cts.), not including lamps, with a sliding scale reducing the price as low as 4 pence for motive power, or in one case 3 pence if used during the daytime alone. The share and loan capital together of the ten companies exceeds £4,500,000. The sales in 1896 exceeded 18,000,000 kilowatt hours, and the returns £450,000, making an average rate of practically 6 pence (12 cts.) per unit, or 6/10c. per 16 candle power lamp hour, which does not include lamps. The most successful, though not the largest of the London companies, received in 1896 an average price of 5.63 pence (11 cts.), and its operating expenses were 3.34 pence (6¾ cts.). Of the municipal plants only that in the parish of St. Pancras is comparable; its investment is about £109,000; its output in 1896 was 850,000 units; its average price 5.34 pence, and its average cost 4 pence. The other three plants in the parishes of Hampstead, Islington and Shoreditch are small or new. The last, however, has been designed by enterprising private contractors, who have installed a "destructor" plant, utilizing the refuse from the streets for fuel, and a thermal storage apparatus of the Druitt-Halpin method. This plant was put in operation only in 1897, and no figures are yet available. It promises, however, to present one of the most favorable examples of municipal supply in the world. In the small Hampstead municipal plant the average price was 5.54 pence, and the expenditure 7.38 pence, so that the rate payers paid a third of the actual cost. The Crystal Palace private company also showed a loss.

The new County Council thoroughfares in London are supplied with several miles of subway tunnels, accessible from various points and providing access through manholes to the sewers as well as facilities for all kinds of subway service, including water mains, gas pipes, electric conduits and a hydraulic service for elevators and motor purposes at over 1,000 pounds pressure. From these subways alcove connections are made on either side between each pair of buildings.

OTHER ENGLISH CITIES.

Outside of London there are recorded eighteen private electric light companies and thirty municipal plants, the trend being evidently toward municipalization. The largest systems are those of Manchester, a municipal plant which last year produced 1,748,000 units at an average price of 5.25 pence and an average cost of 3.01, or fifty-seven per cent. of receipts; Liverpool, a private company, with 1,185,000 output, average price of 7.3 pence and average cost of 3.49 pence, or forty-seven per cent.,

and Glasgow, a municipal plant, with 1,090,000 output, at an average price of 5.58 pence and cost of 4.12 pence, or seventy-three per cent. Birmingham, noted for its municipalization of industries, decided to permit the new industry of electricity supply to go into the hands of a private company for the parliamentary period of fifty years. Of the private companies one, and of the corporations eight show greater expenditures than receipts, these being mostly small systems, only one having more than £3,000 income. At Blackburn, a municipal plant, the average price is 5.91 pence and the expenditures 10.1 pence, or 171 per cent., so that the taxpayers pay 4.10 pence on every unit sold to consumers. At Dover, a private company, the average price is 4.75 pence and the cost 8.80 pence, or 185 per cent., so that the shareholders pay 3.05 pence toward each unit sold to consumers. The highest price charged by a private company is 7.76 pence; the highest price chargedby a municipal system, 6.50 pence; the highest costs are 10.1 pence at Blackburn, and 8.8 pence at Dover, an excess of cost of 1.3 pence on the municipal plant. The lowest cost is 2.72 pence in the Yorkshire private company and 2.66 in the Whitehaven municipal plant, a difference of .06 pence—practically the same. Comparisons even here are not accurate, because, though the Board of Trade returns are on closely parallel lines, they are not entirely the same, and the variants of locality cannot be considered. The closest comparison possible, perhaps, in the world, is between Manchester and Liverpool; the Manchester municipal plant, though installed so late as 1893, is of an old and almost obsolete type; the Manchester output is fifty per cent. greater than Liverpool and the cost iscorrespondingly lower. The figures show practically a "drawn game" as between private companies and municipal plants in England.

England has had rival telephone systems, that of the National Telephone Company and that of the government. Competition has been keen. The government system has held but 1,000 out of over 100,000 subscribers. Almost all the government exchanges have been abandoned, and the most important one existing, that at Newcastle-on-Tyne, has but one-third the number of subscribers of the private company. The government postal service was so much affected by the telephone system that Parliament passed a bill authorizing the Post Office to take over the trunk or long-distance lines, so that these lines are now maintained and operated under the direction of the postal authorities, and subscribers between the exchanges of the private telephone system are connected through the government postal lines. It may be mentioned that in Stockholm, where there is like competition between a government and a private system, the private system is also getting the lead.

NEW YORK.

New York owns most of its water front; its gross dock rentals, amounting in 1895 to $2,084,382, are paid into the sinking fund, but the expenses of the Dock Department, $1,061,697 in 1895, and the interest on dock bonds for $27,053,000, practically offset these. The city, indeed, seems to get less from its docks than if they were private property paying taxes. New York leases ferry privileges each ten years, at public sale, to the highest bidder, who must take over the operating plant at appraisement value—an excellent plan, bringing the city $346,598 rental in 1896.

New York owns and operates its water supply as well as its sewerage system. The water "rates" and meter returns at ten cents per hundred cubic feet, $3,852,396 in 1895, are paid in gross into the sinking fund, but the expenses on water account, $1,808,264, in 1895, reduce the net revenue to about $2,000,000, which is nearly offset by the interest on outstanding water bonds of $44,126,300. Interest on its full cost not accurately known but estimated at $78,000,000 would show a loss.

New York (Manhattan Island only) has four gas companies, the Consolidated including six former companies, the Equitable including the new East River Company, the Mutual with a provision in its charter against consolidation, and the Standard. It is expected that one new company will practically, if not in form, consolidate most of these interests. There have been a number of gas mains in one street. The gas companies publish no statistics of output. The price, as high as $2.25 per 1,000 cubic feet a few years ago, has been reduced by operating improvements by competition and by legislation to $1.20 per thousand feet, the law of 1896 reducing it 5 cents per year from $1.25 till it reaches in 1901 $1.00. Oil chiefly is used for fuel. When the Edison Company began incandescent electric lighting in 1882, gas stocks dropped nearly one-half, but despite all electrical developments, the gas product has increased year by year. The four companies have a stock capital exceeding $53,000,000 and bonded debt above $6,000,000, chiefly at five per cent. The stocks show a market value ranging from $128 to $335, or an excess of $30,000,000 above par, reducing the dividend of 4 to 12% to about 4% on market value.

New York (Manhattan Island only) has seven electric central station systems with fifteen generating stations and 400 to 500 isolated plants, aggregating probably 660,000 incandescent lamps, 14,500 arc lamps (of which 2,815 are city street lamps), besides 28,500 horse power in motors, making an equivalent of over 800,000 sixteen candle power incandescent lamps, or with motors, over 1,200,000 equivalent. There are as many as five competing conductors on the same thoroughfare. The Edison Company controls the Manhattan and Harlem high tension systems, and the United (Westinghouse) Company the Brush arc-light system,

showing the trend toward consolidation. Only the Edison Company prints a report. It has a stock capital of $8,000,000, paying originally four per cent. and now six per cent., the market price of $125 making this five per cent. on actual investment cost, and $6,500,000 in bonds, paying five per cent. interest. It had (November 30) 7,422 customers, 345,280 incandescent lamps, 4,317 arc lamps and 18,874 horse power in motors, the equivalent of 673,484 16 candle power lamps, making it the largest electricity supply company in the world. Its returns in 1895 were $1,771,229, or including the high tension system, $2,222,737. The base-rate for incandescent electric lighting is one cent per sixteen candle power lamp hour (twenty cents per unit), ten cents per arc lamp hour and 10 cents per horse power hour, but all these rates are reduced by discounts and a wholesale base-rate of ten cents per kw. hour is made for general use. The average Edison return in November, 1897, was 8/10c per 16 candle power lamp hour for incandescent lighting with or 3/4c without lamps, or 11 1/2 cents per unit for all services. New York city pays forty cents per night for standard arc lights, or $146 per year, being practically four cents per arc lamp hour, forty-five cents for like lamps in parks, etc., and fifty cents per pair for the Fifth avenue smaller lights. This price is reckoned to cover little above actual cost, including subway rental, of city lighting to the companies, which get their profit from commercial lighting in the same streets. Small anthracite coal costs in New York about $2 75 to $3 per ton, or "alongside" dock, about $2.25 to $2.50. No electric lighting company other than the Edison has paid dividends, except the Brush Company in its earliest years, when the price of city lighting was much higher, and the total share and loan capital of all companies averages much below par.

After Edison in 1882 had proved that electric lighting by underground conductors was feasible, a law was passed requiring all electric wires to be placed in subway ducts. Two subway companies now exist, one for high and one for low tension conductors, charging a rental prescribed by the Board of Electrical Control, a municipal commission, varying with size of duct; the rental for standard three-inch duct is $1,000 per mile, which when street lighting only is furnished is $50 per year per lamp at the usual distance of 250 feet apart. The Board of Electrical Control reported in 1896, 707 miles of ducts for high tension conductors, 211 for Edison low tension conductors, 950 for telephone and telegraph conductors and 56 of ventilating pipe. The city has had the right since January 1, 1897, to take over these ducts, subject to liens and leases, at cost and 10% per year profit (less dividends actually paid), and free ducts must be furnished for the police, fire and other city departments. House connections must be made

at the expense of the supply companies, but all ducts built by or for these companies are in the legal ownership of the subway company. Besides this subway system, New York has in its subsoil a steam-heating system and a pneumatic system for the telegraph companies, producing a complexity probably beyond parallel elsewhere. It has also an oil pipe line across the city. New York receives nothing directly for its subsoil privileges except a ridiculous sum, $141 in 1895, from one gas company, and a franchise fee, $2,587 in 1895, for the oil pipe line; but the supply companies, besides paying taxes to city and state, pay also the expenses of the state commissions and boards of control.

The New York street railway system has been in process of consolidation for some years until now there remain chiefly two great operating companies, the Metropolitan and the Third Avenue company. These are both private corporations, each transferring on its own system within the single fare of five cents. The four lines of elevated railway, originally built by two competing companies, are now consolidated into the Manhattan company. The city has no specific rights of control over these roads, but receives certain license payments per car and other franchise payments from railroads, amounting in 1895 to $352,288.

The new charter for Greater New York makes the rights of the city in its water front, streets, etc., inalienable, and prohibits new franchises for a longer period than 25 years, with renewals optional on the part of the city aggregating 25 years more. On the termination of a grant, the plant shall become the city's property either without payment or at valuation, as the grant may prescribe; if the city takes over property without compensation, it may operate the plant or make a new lease, but if compensation be required, the city shall itself operate for at least five years—an unusual and extraordinary provision. Every grant shall provide for efficient service at reasonable rates. The jurisdiction over gas, electricity and like industries passes to the Commissioner of Public Buildings, Lighting and Supplies; and he is required to provide for tests of gas, of meters and of electric wiring. Private consumers may require a test of meters by the official inspector, the consumer paying for the test if the meter is accurate and the company if it is not.

*OTHER AMERICAN CITIES.**

Philadelphia has a municipal water supply, started in the last century, which has long been its pride and has been considered very profitable to the city. But the figures apparently do not cover interest or depreciation on cost, which is indeterminate, one estimate being of $28,000,000. It started municipal gas works in 1841; these have steadily degenerated until they became a no-

* Lack of sufficient and reliable data compels the omission of detailed statements concerning Detroit.

torious disgrace to the city, and in November, 1897, an ordinance was passed leasing the plant to the United Gas Improvement Co. for 30 years. The municipal plant supplied about 60% of the gas used, purchasing the rest from a private company at 37 cents per 1,000 cubic feet in gas holder. Last year there was manufactured about 5,000,000 thousand cubic feet, 3,000,000 of coal gas and 2,000,000 of water gas; the public lighting consumed 674,000 of this, 545,000 being for street lamps, and there was "unaccounted for," 1,132,000. There were 168,644 consumers on the books of the bureau. The annual report complained bitterly of the bad condition of the system, and of the difficulty of obtaining adequate appropriations for modernizing it. The price of gas has been $1 per 1,000 cubic feet, said to be of 19 candle power, but the gas has been notoriously poor. The receipts in 1896 were $3,318,337, and a gross profit of $352,988 was reported. It is stated that $674,031 worth of gas is supplied free to the city. An accountant's report, however, shows $281,569 additional expenses, aside from interest on investment, improvement cost, etc., and he figures, including extension improvements, a net deficit for the past three years of $416,000 per year.†

Philadelphia's electric lighting companies are now for the most part consolidated in the hands of the Pennsylvania Heat, Light & Power Company, which includes the Edison system. There are in the city and suburbs 6,661 street arc lights at 30 to 37c. per night, or $109.50 to $135.05 per year, costing the city about $800,000 yearly. The price of electric lighting in Philadelphia is on a base rate of 3/4c. per 16 c. p. lamp hour, somewhat, but slightly, reduced by discounts. In 1894 a Committee of Councils was appointed to consider the establishment of a municipal electric plant reported strongly against the plant.

Chicago was formerly supplied with gas by nine companies with at least three sets of pipes in some streets, of which eight have been consolidated in 1897 into The Peoples' Gas, Light and Coke Company, originally organized as the Gas Trust Company in 1887, but blocked by legal proceedings until the consolidation act of 1897. The consolidated company has a capital stock of $25,000,000, on which it pays 6 per cent. dividend, and a bonded indebtedness of $29,000,000 at 5 per cent. interest. It has about 158,000 customers, consuming over 5,000,000 thousand cubic feet; its revenue, including by-products, is above $6,000,000. The city receives 3½ per cent. on gross receipts or at least $150,000 per year exclusive of city and state taxes. The price of gas, which was $2.50 in 1883, was made in 1893 $1.25 with a reduction of five cents per year, by which the price is now $1.

In electric lighting, the Chicago Edison Company has

[†See the articles by Dr. Frederic W. Speirs and Col. John L. Rogers for a more detailed discussion of this subject.—EDITOR.]

consolidated into it eight other companies, including all except four small companies still existing on the south side. The Chicago Edison Company (Nov. 30, 1897), has 6,000 customers, with 5,500 arc and 234,000 incandescent lamps and 7,400 horse-power in motors. The smaller companies, south of 39th street, show 2,500 customers, with 1,600 arc and 67,000 incandescent lights and but 45 horse-power in motors. Besides these there are probably 200 or 300 private plants, aggregating perhaps 8,500 arc and 200,000 incandescent lamps and 1,000 horse-power in motors. This shows a total in electric lighting of 15,700 arc and 500,000 incandescent lamps, the equivalent of 657,000 16-candle power lamps and 8,445 horse power in motors, in all nearly 900,000 equivalent. Chicago reported, 1896, 1,624 street arc lamps, of which 459 were supplied by private companies at $102.70, 59 at $137.50 and 116 from a municipal plant at $96.76. Oil chiefly is used by the gas companies; soft factory coal costs $1 to $1.10 at riverside factories. Chicago has no general subway system, but the conductors are underground except in the suburbs. The subway legislation requires that for new grants the consent of property holders shall be required for new subways as for new street railways.

Boston has been supplied with gas by the Boston and the Bay State Companies in the city proper and by five local companies in its suburban districts. All the Boston interests have been consolidated (Dec., 1897) in the New England Coke & Gas Company, with $17,000,000 stock and with $17,000,000 bonds. The two chief companies have paid 10% and 9% dividend on capital of $4,500,000. The price of gas in Boston is now $1. Boston has its electric lighting chiefly from the Edison Company, with $3,750,000 capital, paying 7 per cent., and no bonds, and the Boston (high tension) Company with $1,700,000 capital, paying 6 per cent., and $1,062,000 bonds, besides which there are a suburban company of $174,400 capital, a small block plant company of $9,500 capital and 200 private plants. The Edison Company reports 1,541 arc lamps, 158,000 incandescent lamps and 6,109 horse-power in motors; the Boston Company (1896) 2,193 arc lamps, 50,629 incandescent lamps and 1,468 horse-power in motors. The city lighting is supplied by the Boston Company with 2,159 arc lamps averaging 35 cents per night or $127.75 per year. The price of incandescent lighting is $\frac{9}{10}$c. per 16c. p. lamp hour, base rate, with lamps, subject to discounts; the average return for 1896 was $\frac{7}{10}$c. for incandescent lighting. All these systems are under the control of the Massachusetts Board of Gas & Electric Light Commissioners, from which permission to increase capital, extend systems and organize new companies must be obtained, to which detailed annual reports must be made, and by which a valuable annual report is issued.

Brooklyn obtains its gas supply from the Union Gas Com-

pany, a consolidation of five or more former companies. It obtains its electric lighting from the Edison Company, which has consolidated with it the Citizens (high tension) Company, and from two small companies in the Eastern District, besides private plants. A new Kings County Gas & Illuminating Company has recently been organized with a view to electric lighting. The Edison Company has a capital of $3,750,000, paying 6 per cent. dividends, and bonds of $1,000,000 paying 5% interest. The price of incandescent lighting is 1c. less discounts for average consumption, and less additional discounts for large bills, bringing the average price below 3/4c. per 16 c. p. lamp hour. Brooklyn has 3,200 street arc lamps, of 1,200 nominal candle power, for the most of which it pays 34c. a night, or $124.10 per year.

Toronto, Canada, should be cited as a city which has taken over the ownership of its street railway tracks, which it rents to the Toronto Railway Company, under a carefully drawn agreement, giving the city from 8 per cent. up to 20 per cent. of gross receipts and assures reasonable fares, special tickets being sold for working men's hours at 8 for 25c., and children's tickets for school hours at 10 for 25c. Ordinary tickets are 6 for 25c., while at Kingston, with a private company, the price is 8 tickets for 25c. Two years since, the municipality proposed to establish a municipal lighting plant, but it was voted down, and the gas system is operated by the Consumers' Gas Company, and the electric system by the Toronto Electric Light Company. The city makes a contract for street arc lamps each four years.

In 100 American cities of 30,000 population and over recorded by the National Electric Light Association, five have municipal plants; and of 450 smaller cities, fifty-three have municipal plants; or a total of 493 cities with private and fifty-eight with municipal plants. The figures of price for street lighting for the standard arc lamp range from $64.75 in Dubuque, on moonlight schedule, and $68.52 costs (direct expenses only), all night, in Detroit's municipal plant, to a price of $156.95 in Fall River, Mass. The New York report shows prices to be $146, $164.25 and $182.50, nominally for 1,200 candle power lamps; in fact, the first are the standard arc lamps registered elsewhere as 2,000 candle power, the second are the same lamps under exceptional circumstances, and the third are pairs of lamps, not single lamps, supplied from the Edison system. The standard arc lamp using 450 watts in the arc (ten amperes supplied at forty-five-fifty volts) is usually called a 2,000 candle power lamp, but this in New York is rated officially as "at least 1,000 candle power" and is entered in the National Electric Light Association reports as 1,200 candle power, though in other cities counted 2,000, while the lowest standard lamp of 300 watts 6.8 to 7 amperes at forty-five to fifty volts), in use in Brooklyn and elsewhere, is counted as 1,200 candle power.

DATA OF COMPARISON.

The facts as to municipal industries in the chief cities and from the several countries show such range and diversity in method and results that conclusive generalizations are not easy. Each advocate can indeed find individual facts in defense of his own views. It is the usual device of socialist writers to emphasize the ills of an existing system, and to assume that in their new Utopia all would go well. This has been true of much of the argument for the municipalization of industries. The wiser course is perhaps to build from existing conditions, by eliminating the bad features and promoting the good features of an existing system, unless the evidence is conclusive that another system would be in all or in most respects better. In this belief I shall state my own conclusions from these data, and from my personal experience.

It is, of course, not more practicable to reconstruct existing systems altogether on these lines, than it is to remake altogether an existing city in the light of present knowledge and modern methods. Yet Paris and other continental cities have been largely reshaped within this generation, and the trend of progress will be, I think, in the directions indicated. Nor would municipalization be possible with justice, except in view of existing conditions and investments. It is not just, for instance, that a municipality should take over private industries by right of eminent domain or legislative enactment, at the appraisement value merely of the existing plant. The electric lighting industry for example, though not yet 20 years old, has shown extraordinary development and changes, and a large part of its actual cost has been in patent rights, engineering expenses and replacements of machinery or distributing plant. Mr. Edison's original two-wire underground system in New York has been entirely replaced by his improved three-wire system. To write off such replacements is not always practicable in industries which have not reached the paying point. Expenditures on this account are legitimately a part of the actual investment, and they must be taken into account if municipalization is not to mean confiscation. It should be repeated that a fair comparison between a private company and a municipal industry requires that the private company shall have, as in Berlin, the advantages usually associated with a municipalized industry.

THE PREFERABLE SYSTEM.

The modern city, it seems to me, should own and control its streets, including, as far as possible, both sub-soil and surface facilities of distribution; should itself provide sewerage and water supply, but should leave to private companies the operation of industries which involve manufacture or complex administration. The city should receive adequate rent for the use of its street facilities, should obtain for the people the social increment by limitations of profit or price, and should give to the private companies every economic advantage of tenure, centralization, etc., possible to a municipalized industry. Charters should be granted for a specific period say of 25 years, with renewals at the option of the municipality upon similar terms, so that satisfactory service would insure a continuing franchise. With the proviso, as in the New York ferry leases, that the new lessee might take over the operating plant at an appraised valuation, this would invite and safeguard the investment of private capital without undue risk. Provision should be made, as in Paris, to secure for the public the most modern improvements and consequent reductions in cost. The city should have its own services, as street lighting, at cost, this including of course, investment as well as operating charges. With such safeguards, one gas company and one electric light company, competing with each other, and one surface railway company affording facilities for transfer and competing with an underground or elevated system, would give the best economic results. Parallel grants should be made only on the certificate of an authority like the Massachusetts Gas Commission or the New York Railway Commission that they would be for the public benefit. If the grant is not exclusive for the whole city, it should be limited to specified sections.

The city should provide under its main thoroughfares an accessible subway tunnel, as a modern building has in its cellar space for its working apparatus. This sub-street, such as London now has and Stockholm has planned, should give easy access by manholes to the sewers, and should provide space for water mains, gas pipes, electric conductors and other services, both for trunk lines and for local distribution, with access to buildings by side recesses between each two buildings. In other streets a distributing subway system of ducts, preferably on each side to prevent displacement of paving, should be comprehensively planned for water, gas,

electricity, etc., with house access at the curb between each two buildings. Rent for these facilities, covering construction interest, maintenance cost and a license for such use of street facilities, should be charged by the city to its own water department, for instance, as well as to the private companies. Where a special system requires private construction, the street license but not the construction interest should be charged. The city might also own and lease the track for a surface railroad as in Toronto, as well as provide a rapid transit tunnel, as is proposed in New York.

An honest and efficient municipal inspection should protect the interests of the citizens. Actual tests should be made from time to time and the results published. Meters should be tested by municipal inspectors on demand of any consumer, as in London, the company paying the charge if the meter is within and the consumer if it is without the legal requirements. Under these conditions the public should get the surest and best service at the lowest price, the few advantages of a municipalized industry with the many advantages of a privately managed industry.

ECONOMIC OBJECTIONS TO MUNICIPALIZATION.

The first vital economic objection to municipalization is on the score of cost. Economy is closely associated with the progressive management necessitated in private enterprise. A public body does not get its work done as well or as cheaply as a private corporation. The mixture of politics with business is demoralizing to both. Government plants are apt to be "behind the age." The United States government, I have been told, exhibited at Philadelphia in 1876, and again at Chicago in 1893, a cartridge-making machine which private manufacturers had superseded in 1871. The electric lighting plant installed at Manchester in 1893 was three years behind date at that time. The cost of government work is notoriously greater than that of private work. Ships built in the navy yards are known to take longer to build, to cost more and often to be less satisfactory than those built by private contract. In New York the city charges to private companies $8 for the first square yard and $4 for each additional yard for repaving granite block on concrete foundation, and the charge is defended as practically the cost to the city. The same work was done by a private corporation for the city at $2.50 with some profit, and a recent job of which close and complete record was kept cost

exactly $2.02½ per square yard. The Court House in New York and the Capitol at Albany are notorious examples of the waste of public moneys in public work too often invited by our political system.

A municipalized industry is at correspondingly serious disadvantage as to management. A modern city government, however highly organized, attempts too much when it attempts everything. While the whole trend of industrial progress is toward consolidation within the same industry, it is toward a differentiation of different industries. A private corporation usually makes contracts for work outside its immediate field, because a specialized organization can do better in any specific work than a general organization. Asphalt paving, for instance, is done for all our cities at best advantage by the Barber and other asphalt companies, which do only this one thing. Contract work in the best private hands safeguards a public employer as no other method can—which is in itself the strongest argument against the municipalization of specialized industries. The Brooklyn Bridge railway, cited as proof that a municipality can operate a railway, was, as unfortunate Brooklynites know to their cost, disastrously managed, and the crush at its terminals was dangerous to life, until a commission of experts trained in the service of private companies devised remedies. The contrast between American and English railways, private corporations, and German railways, state organized, is in point; the Pennsylvania and the New York Central systems are recognized as foremost in the world. The Italian government after "nationalizing" its railways organized two private companies to take over and operate them. In England the private telephone company's "centrals" have taken over nine tenths of the business, and a consolidation of the government and the private system is probable. In fact, the public service fails to assure the adequate salary and permanence of tenure necessary to retain concentrated and continuous directive ability of the highest order, although the public distinction of office-holding in part offsets the lower salaries in public employment. Many great corporations in New York pay their executive as high or higher salaries than that of the Mayor of New York, even under the new charter, and this high payment for brains is not at the

expense of good payment for wages. Successful direction means an increase of business which gives wider employment to more men at better pay.

A municipalized industry, further, is under constant political pressure to pay wages higher than the market rate. The Trades Unions, indeed, favor municipalization largely because they consider that this would involve better wages. On the contrary, nothing could be more demoralizing in the actual labor market, nor more destructive to the legitimate influence of trade organizations. Municipalized industries would not be sufficient, short of entire socialism, to establish the market rate of wages. If municipal industries should pay twenty-five cents a day more than private industries, there would be a rush toward the municipal industries. Men would be induced to pay that, or a part of it, for a place, and would become the easy prey of designing politicians or corrupt superintendents. Such an increase of wages in a force of 1,000 men would mean $75,000 a year, with enormous possibilities of personal corruption and public demoralization beyond anything at present known. It is said that the postal, police and fire services have been kept "out of politics"; as a matter of fact, these classes, largely through their benefit associations, exert an enormous influence at Washington and at Albany, particularly in pressure to raise wages; and in the recent New York election one political "boss" appealed specifically to the interests of these special classes for support. Even under better municipal conditions, as in England, it has been found most difficult to preserve discipline in a municipalized industry, because of the pressure of politicians to reinstate discharged men, as I was personally told in the municipal electric lighting station of a great English city.

FISCAL RELATIONS OF MUNICIPALIZATION.

It has been urged as an objection that private corporations are too often "extortionate monopolies," robbing the people of their right to the social increment. This is in part, and in some cases, true, but it is an objection that can be met in a better way than by municipalization. It is evident that the trend in the industries cited is toward consolidation, but it is true also that a consolidated company usually reduces prices by virtue of diminished cost for the business motive of increasing consumption and profit.

The true objection to trusts is not economic, but financial and political. The enormous advances in water and gas stocks show that in these cases the social increment value has in fact gone, not to the public, but into private pockets. It is not always the original investor nor indeed the present investor who profits by such advance, for with increasing profits and a diminishing rate of interest the price of the stock goes up until it pays only a normal return, but more probably the speculative "operator." But this objection can be fairly met by the limitation of franchises and the fair regulation of prices, limiting the return say to ten per cent. on actual investment, with proper depreciation and amortization allowances, or providing that profits above a normal return shall be shared with the municipality. The latter is the better way, because it leaves to private management an incentive to efficiency and economy, and like economic rent it does not tend to increase price. Such regulation should be not by legislative interference, but by provision in the grant or charter. Private corporations doing public service should also be required to print full reports. These provisions would tend to assure fair prices, prevent over-capitalization, and leave little margin for corruption.

It is rightly urged in favor of municipalization that a city can borrow for investment purposes on its bonds at a very low rate of interest. But it is evident that a private company, safeguarded by reasonable conditions, can borrow on its bonds on almost as close rates, certainly within one per cent., and the higher rates have been chiefly because of the uncertainties incident to our American methods. The increase in market value of stocks as dividends have increased, show that in a well-settled business, as that of the London water companies and the New York gas companies, the shareholders in a private company no longer obtain much above the normal rate of interest, which is steadily decreasing.

POLITICAL OBJECTIONS TO MUNICIPALIZATION.

The final and strongest argument against municipalization is, even more than against trusts, political rather than economical. The charge against private corporations that many of them have been among the worst breeders of political corruption is, in some but not in all cases, probably true. This is in great part the fault

of public opinion. The public does not pay adequate salaries to its legislators. Men taken from their personal business during the earning months of the year do not receive enough for their living and their campaign expenses. Those of honest purpose find it not easy to resist the "opportunities" offered them by clever lobbyists, while the less scrupulous, sent both from city and country districts, almost openly take or ask money bribes. Public opinion lends an easy sanction to the fallacious argument, that it is better to surrender to highwaymen a part of the property in one's charge than to lose it all, which permits men of the highest personal integrity and honesty to condone or overlook, through an indirect chain of agents and lobbyists which evades responsibility, what they would not personally or in their own private interests permit. It is indeed highly to the credit of our legislators that so many, under such temptation, are ready, as I have found, to protect a corporation against "strikes" when it is honestly trying to serve the public and is prepared to makes its facts and figures fully known. But to take passage on a pirate ship so as to avoid danger from pirates, is not altogether wise, and to give over an industry to the spoilsmen by municipalization so as to prevent corruption, is scarcely the common sense or commendable course.

The opportunities for and invitations to political corruption in our great cities and in our state legislatures, if great industries now in private hands are taken over by the city or the state, would be the most serious menace possible to really democratic and American institutions. In the past few years the growth of paternalism in our government, and of the restrictive policy in our trade relations, foreign and domestic, has turned American thought unconsciously toward what is practically state socialism, the direction or misdirection of the affairs of an individual or an individual enterprise by governmental machinery. The American theory of government is based on individual freedom, the right of an individual to manage his own affairs without interference, unless he interferes with his neighbor. Democracy and socialism are in this sense absolute contraries. Only a generation ago this country freed itself from one form of industrial slavery; it is the great argument against the municipalization of industries that it would be not only a step, but a long stride, toward the new industrial slavery of state socialism.

MUNICIPAL ELECTRIC LIGHTING.

By JOHN R. COMMONS.

In advocating municipal electric lighting I accept the burden of proof. I agree that government, whether national or local, cannot safely undertake experiments on a large scale. The assumption of new functions must be shown to be not merely desirable in the interests of a few, or adapted to the doctrinaire ideal of a well-rounded form of government, but it must be shown to be necessary and essential for the preservation of important interests affecting the welfare of the entire body of the people. Governments do indeed enter upon experiments, and the assumption of a well-established industry may itself be called an experiment. But in the sense in which I use the word, the introduction of new modes of manufacture or service and the creation of new wants among the people are matters involving risks of an incalculable and speculative kind, and this is not the business of government. Private parties should be encouraged to push forward in all the untried fields. If their ventures are unsuccessful, if they are ahead of their times, failure and bankruptcy will affect only them and their immediate dependents. Successors will come in, and if the service in question meets a truly growing need of the people, success and fortune will follow. But if government ventures upon the sea of uncertainty, bankruptcy means the beginning of anarchy. Government does not perish like the individual or the corporation, and failure on a large scale, if it involves repudiation or oppressive taxation for years to come, produces a popular revulsion and deep-seated distrust of government itself in all its departments.

A criticism should be made upon those cities which entered upon municipal electric lighting eight or ten years ago. Here was a new agency utterly unknown as a commercial quantity; new machinery of all degrees of imperfection and uncertainty; cost of operation, depreciation, risks, unsettled; engineering and mechanical requisites on the part of employees

quite indefinite; public opinion not yet crystallized through adequate discussion and experience. In the face of all these uncertainties, it would not be strange if many cities have incurred debts for fabulously priced machinery which a few years of experience have since discarded, and if the reaction has driven the citizens to the best kind of a bargain they could make with private companies. It is reported that eight or ten towns and cities which had installed municipal plants have abandoned their undertakings and sold out to private companies at a serious loss. That the number is so small, considering that nearly three hundred cities and villages have adopted municipal ownership, certainly speaks well for the industrial ability of our small cities. On the other hand the fact that these failures have not prevented an astonishing increase in the number of municipal plants indicates some deep-seated causes which are worthy of our attention. In the State of New York alone, the six municipal plants of two years ago are now increased to twelve and possibly more.

MUNICIPAL FUNCTIONS INCREASING.

Municipal functions have increased very slowly. Cities have accepted the principle, just as every advocate must also do, that the burden of proof is against the assumption of new functions. Natural lethargy and difficulties in the way of coöperative action have been important checks, but equally or more important has been that wise Anglo-Saxon conservatism which makes sure and impregnable every acquisition in civilization before advancing to new fields. In the matter of electric lighting only weighty and even vital considerations can push forward the movement for municipal ownership over any extensive range of cities. As far, however, as the experimental character of the industry is concerned, fifteen years of experience and marvellous inventive progress have reduced electric lighting to a system and made all its parts and details as readily calculable as any of the functions in which cities are now engaged. The rapid growth of cities themselves with an assured increase of demand for light and power, combined with the perfection of the mechanical equipment and the fairly reasonable competition between producers of the same, have removed for the present the weight of any criticism similar to that which might attach to those cities which ventured upon this field in the early days of the industry. The questions which now present

themselves to cities considering the proposed operation of municipal plants are therefore greatly simplified by the elimination of these strictly mechanical questions. The new problems are of a quite different character. They may be briefly summarized under the headings—improved service, diffusion of use, stimulation of industry and purification of politics. These apply to all industries requiring a municipal franchise, and with the growth of a city, any one or all of them may gather such increasing weight that the city is compelled to assume the operation of the industry in question. Streets and alleys have of course long since been municipalized, and it would be utterly intolerable even in small villages if vehicles and horses were subjected to tolls at various street intersections. The sewerage system comes next in urgency. Only three cities in the United States have private-owned systems of sewers. This service must be made universal and must be of the highest quality for both poor and rich sections. It, therefore, like the streets, has been municipalized and made entirely free of tolls. New Orleans with its private sewers is suffering not only from inadequate sewer service but from corrupt politics growing out of such service. Water works follow sewers in the extent of municipalization.

MUNICIPAL LIGHTING SUCCESSFUL IN SMALL CITIES.

In electric lighting the process of municipalization is as yet mainly in the small places. While but three cities over 100,000, according to the census of 1890, have municipal electric plants, it appears from the list of sixty-four cities with municipal plants, as given by Mr. Francisco*, that twenty-nine have less than 5,000 population, nineteen from 5,000 to 10,000, making a total of forty-eight or three-fourths under 10,000; and fourteen range from 10,000 to 50,000. The fact that the preponderance lies so largely on the side of the small cities and villages is sometimes advanced as showing that large cities are not competent to undertake this function. While such a conclusion is of course not logically warranted, there are patent reasons why municipal ownership should achieve its first success in the smaller municipalities. Here, as I have already said, government lies close to the people. The officials are known to everyone. They cannot retire under the shield of their friends and party councillors. They are acces-

* "Municipal Ownership; Its Fallacy," p. 89.

sible to the personal complaints of everyone. In large cities newspapers do the complaining, and everybody discounts these as the organs of partisanship or corporate jobbery. The people do not come in contact with their officials. But it is otherwise in the small cities, and the result is a constant effort on the part of officials to meet the demand for efficiency and economy.

The voting constituency, too, has a preponderance of small property-owners, the thrifty and independent middle class, who have always been the bulwark of popular government. There are no multi-millionaires on the one hand and no overwhelming array of wage-workers dependent upon them upon the other. This relieves the community both from the machinations of a few rich men who in every city use their power to exploit their neighbors, and whose interests are, therefore, against honest government; and also from the blind struggles of the working classes to secure through politics those advantages and liberties which they are unable to obtain in industry. This makes both the administration of the civil service a simple matter, and the hours and wages of labor in public employment conform to the most exacting conditions that obtain in private industry.

Below is a table showing for street plants in large and small cities, the varying costs of labor per arc light for public and private plants.

Table I.

COST OF LABOR PER ARC LIGHT.

1. Labor Employed, 72—84 Hours per Week with Water Works Plant.

	Arcs.	Per Year.	Per Lamp Hour.	Authorities.*
Dunkirk, N. Y.	75-2000	$a12.18 b12.95	$a.0069 b.0044	a Computed, '97. b Foster.
Batavia, N. Y.	108-2000	19.21	.0056	Computed 1897.
Herkimer, N. Y.	55-2000	28.58	.0097	Computed, '96.
Marshalltown, Ia.	64-2000	9.19		Computed from Mayor's figures.
Lewiston, Me.	100-2000	22.00	.0079	Foster.
Bangor, Me.	150-2000	24.00		Parsons.
Goshen, Ind.	40-2000	31.00		Parsons.
Wheeling, W. Va. (with gas).		37		Parsons.

2. Labor Employed, 60—84 Hours per Week—Street Plants Alone.

	Arcs.	Per Year.	Per Lamp Hour.	Authorities.
Watervliet, N.Y.	108-2000	$a25.00 b24.44 c26.61	$ .0062	aParsons bFoster. cComputed, 1897.
Easton, Pa.	108-2000	a22.76 b28.00	.0075	aFoster. bParsons.
Elgin, Ill.	98-2000	32.50		Foster.
Bay City, Mich.	108-2000	a17.16 b24.00	.0071	aFoster. bParsons
Aurora, Ill.	179-2000	28.50		Parsons.
St. Joseph, Mo.	253-2000	27.50		Parsons.
Fairfield, Ia.	14-2000	a26.00 b12.08	.0178	aParsons. bFoster.
Painesville, O.	70-2000	20.00		Parsons.
Little Rock, Ark.	a133-2000 b210-2000	a35.12 b21.00	.0162	aFoster. bParsons.
Topeka, Kas.	184-2000	34.00		Parsons.

* See comments in note on page 688, *infra*.

PUBLIC PLANTS WITH COMMERCIAL LIGHTING.

3. Labor Employed, 60—72 Hours per Week.

	Arcs.	Per Year.	Per Lamp Hour.	Authorities.
Hannibal, Mo.....	350-2000	$14.89	$ .0068	Foster.
Luverne, Minn.....	124-2000	8.71	.0048	Foster.
Farmville, Va.....	63-2000	30.02	.0139	Foster.
Madison, Ga.....	73-2000	26.51	.0122	Foster.
St. Clairsville, O.....	105-2000—80-2000	9.25—15.97	.0070	aParsons. bFoster.
Chehalis, Wash.....	90-2000	45.61	.0118	Foster.
Westfield, N. Y.....	110-2000	21.06	.0194	Foster.

4. Labor Employed, 48 Hours per Week—Street Plants Alone.

	Arcs.	Per Year.	Per Lamp Hour.	Authorities.
Chicago, Ill.....	1,100-2000	52.21—52.20	.0131	aFoster. bParsons.
Detroit, Mich.....	1,700-2000	38.38	.0101	Computed, 1897.
Allegheny, Pa.....	620-2000—1,235-2000	27.00—23.46	.0058	Parsons, Computed, 1897.

5. Private Plants.

		Per Year.		Authorities.
N. Y. City Average...		34.50		Parsons.
N. Y. State Average..		19.50		Computed from Census, 1890.

It will be seen that the labor cost in the New York city private plants is $3.88 per arc less than in Detroit and $16.71 less than in Chicago. This difference is accounted for in two ways: first, by the much larger output per station in New York city; second, the higher wages, shorter hours and, consequently, larger staff of employees in the public plants. In the larger cities, on the other hand, the larger output and larger units in boilers, engines and dynamos would tend to reduce the labor cost per unit of product. The case of Allegheny, with its extremely low labor cost notwithstanding short hours is noteworthy.

It should be said as an offset to the low wages and long hours in smaller places, that the work is much easier than in large plants. When one fireman and one engineer run a small plant of 100 arcs in conjunction with water works, probably less than one-half their time is employed in actual work. The cost of living too is much less than in cities. Consequently the urgency for both high wages and short hours is relatively less.

WATER WORKS AND ELECTRIC PLANTS COMBINED.

A very important advantage in a small town is the ability often to combine the electric lighting plant with the water works. That most industrious opponent of municipal ownership, Mr. M. J. Francisco, of Rutland, Vermont, in his astounding pamphlet "Muncipal Ownership, Its Fallacy," * is constantly insisting on

* Published by the author, Rutland, Vt., 1895.

the duplicity of municipal officials who charge the salaries of firemen, engineers and superintendents of electric works to the water department. In all such cases he forthwith corrects the dishonest officials by charging all the wages and salaries in the water works to the electric light department. The relative honesty of the two methods may be judged from the following typical cases.

The village of Batavia, N. Y., owning and operating its water works system, decided, in 1893, to add an electric lighting outfit to the plant. An addition was made to the water works building for the electrical machinery, and a new boiler was erected. Two engineers, at $65.75 per month each, had been all the force needed for the water works. For electric lighting there were added one electrician at $65, one trimmer at $45, and one fireman at $45, and the engineers' salaries were increased $5 each per month; making the total additions $165 per month, $1,980 per year, or $19.22 per arc lamp per year. The combination with the water works saves the salary of one engineer, $65 per month, less extra pay to water works engineers.

The city of Dunkirk, N. Y., installed an electric plant with its water works in 1888. The water works staff had been: two engineers, $70 each, two firemen, $50 each, superintendent and assistants, $165; total, $405 per month, or, with $350 per year for clerk and collecter, $5,210 per year. When the electric plant was added with an additional boiler, a trimmer was employed at $55, and the firemen were given $5 extra pay; total, $65 per month, which, with $133.62 extra labor on lines, made the total labor cost $913.62 in 1897, or $12.18 per arc. As a matter of fact, the Dunkirk labor cost is only $133.62 a year more for both water supply and electric lights than it had been for water supply alone, because one superintendent at $100 a month now does the work formerly done by superintendent and assistants at $165 per month, and the total labor cost for both departments in 1897, including extra labor, was $5,343,62 against $5,210 for water alone before 1888. But this saving of $65 per year in the superintendent's force has been properly credited to the water department, and the extra expense for electric lighting has been figured as above at $913.62.

In considering the cost of operation in these plants connected with water works, the conscientious defender of the higher charges of private plants is justified in pointing out that they cannot be taken as a fair basis of comparison with private plants operated alone. He, however, would hardly go as far as Mr. Francisco and claim that their operating accounts were dishonestly

compiled, nor would he adroitly add the water account to the electric account.

The officials in these cities have prepared these statements with a definite purpose, namely to show to other cities having water works plants the very slight additional expense that they would incur by adding an electric plant to their water plant. From this point of view their statements are straightforward and correct. They demonstrate beyond question the decided advantage that every small city with a water plant has in espousing public ownership and operation of electric works, provided the two can be incorporated in one establishment.

There are many small villages now enjoying electric lighting which would probably not have secured this privilege had not the people as a whole, in their corporate capacity undertaken it. Mr. Foster, in reviewing the list of thirty-four towns whose costs he has tabulated, and showing that thirteen have less than 3,000 inhabitants, five have between 3,000 and 5,000, four between 5,000 and 10,000, seven between 10,000 and 20,000, four between 20,000 and 30,000, and only one is of the first class, or over 1,000,000, remarks that "somewhat over half the number are places where it is doubtful if a commercial or private plant could be made to pay under any circumstances." If this is so, the question at issue is not one between public and private ownership, but whether they shall have electric lighting at all. If they have made a success of it, and have produced light at a cost no greater than other cities are paying private companies, this is certainly to the credit of the principle of municipal ownership under such circumstances if under no other.

PREVIOUS INVESTIGATIONS CRITICIZED.

In attempting to make a comparison of the actual operations of municipal and private ownership of electric lighting plants in the United States that shall be at the same time fairly exhaustive and fairly accurate, one is confronted with the magnitude and expense of the undertaking. Nothing less than a governmental bureau can adequately undertake so large an inquiry. It must, therefore, be to the greatest satisfaction of the public to know that the United States Department of Labor, under the supervision of Carroll D. Wright, has undertaken exactly such an investigation.

In view of this prospective mine of information, I shall not undertake to consider the whole field, but shall devote my attention to a few municipal plants which I have been able carefully to study personally, and to a critical examination of some of the more important statistical inquiries that have been made hitherto. These are three in number: that of Mr. H. A. Foster, that of Mr. J. Francisco, and that of Professor Frank Parsons.*

The first two are antagonistic to municipal ownership, while the latter favors the proposition. I have tabulated below the results obtained by these three writers as to the cost per lamp hour and the cost per year of arc lighting in all cases where two or more estimates for the same city are given. These reports are not all made upon the same unit as a basis and I have been compelled to make two sets of computations in order to bring them to the same basis for comparison.

I have selected these three writers because the opponents and the advocates of municipal ownership throughout the country seem to rely upon them for their data and arguments in maintaining their respective opinions. It will be seen that they reach the most contradictory results. Mr. Francisco far exceeds Mr. Foster in his high estimates of the cost of municipal operation, and Mr. Parsons, while his estimates are materially lower than either, is yet in such cases as I have been able to examine, above the estimates made by the municipal officials themselves.

With reference to the method of the inquiry itself as conducted by the authorities, it must be borne in mind that correspondence

*Mr. Horatio A. Foster was employed by the *Electrical Engineer* to report on an inquiry into municipal electric lighting, undertaken by that journal. His report is published in the issue of September 5, 1894. Mr. Foster is an electrical expert and accountant of high standing, who was employed on the census of 1890, and his report is undoubtedly the ablest and most candid of all the investigations made from the standpoint of those who defend private companies. Prof. Frank Parsons, the results of whose extensive investigations were published in the *Arena* during the latter half of 1895, gives the most painstaking and exhaustive statistical analysis of electric lighting yet made from the standpoint of those who favor municipal operation. While these two writers reach apparently opposite conclusions regarding the cost of municipal enterprise compared with private enterprise, yet their differences are found not so much in the labor cost per arc light as given in Table I as in their estimates on interest and depreciation. The actual operating expenses, including wages, fuel, stores and supplies, are matters of record stated by the local officials themselves in their annual reports together with the total number of lights operated during the year. Therefore but little variation could occur in computing the labor cost, as will be seen by noting the cases where the two happen to give figures on the same plant. I give herewith all the cities which either one reports. Mr. Foster does not state the cost per year but he states the cost per lamp hour and the number of hours per year, and I have computed the cost per year. Mr. Parsons gives only labor cost per year, and not the cost per hour or number of hours. In using these figures, extreme cases should be excluded, as Arlington, Minnesota, and Chehalis, Washington, given by Mr. Foster. In the former there were but four arcs and one hundred incandescent lights, and in the latter there were the extra high wages of the Pacific coast. Where I have been able to examine personally a municipal plant or have made estimates from the annual reports I have so indicated.

Table II.

Comparative Estimate of Net Cost to City for Street Lamps—Francisco, Foster, Parsons.

Cities.	Candle Power.	Hours per Year.		Cost per lamp hour.		Cost per lamp year.				
								Parsons.		
		Francisco.	Foster.	Francisco.	Foster.	Francisco (Computed).	Foster (Computed).	Operating Expense.	Operating Expense, Interest on Debt, Depreciation 5%.	Computed Interest 6% and Depreciation 5% on Total Investment.
Alameda, Cal.	2000	..	1490	.1458	.124	..	$178.80	$120.00	..	$163.80
Allegheny, Pa.	2000	4000	..	.0280	..	$22.00	..	64.00	$79.00	..
Arlington, Minn.	1200	1460	2000	.021	.0503	306.60	100.40	40.00	..	56.50
Aurora, Ill.....w. w.*	2000	2622	2426	.0447	.0871	117.20	90.37	53.50	61.00	..
Bangor, Me.....w. w.	2000	3750	..	.0278	..	104.25	..	34.00	..	54.70
Bay City, Mich	2000	..	2418	.0376	.0308	..	74.47	50.00	60.00	..
Braintree, Mass. ...	1200	1912	..	.0517	..	98.85	..	47.50	69.50	..
Bloomington, Ill...w.w.	2000	2247	..	.0545	..	122.46	..	50.00	66.50	..
Bowling Green, Ky.w.w.	2000	2190	..	.0498	..	109.04	..	50.00	60.00	..
Chicago, Ill.	2000	..	3950	..	.043	167.78	169.85	96.67	..	152.47
Council Grove, Kas.	1200	1875	2000	.0779	..	146.06	..	O†	..	27.00
Crawfordsville, Ind.	2000	2190	..	.0671	..	146.94	..	25.50	..	41.25
Crete, Neb.	1200	..	1590	..	.0605	..	127.99	O†	..	17.10
Decatur, Ill.....w. w.	2000	1460	..	.0752	..	109.79	..	50.00	..	..
Dunkirk, N. Y.....w. w.	2000	3000	3915	.0278	.0378	83.40	80.39	46.00	59.25	..
Easton, Pa.	2000	3319	3031	.0445	.0418	148.24	126.80	85.00	108.20	..
Elgin, Ill.	2000	2190	2500	.0546	.04	126.38	100.00	48.00	55.50	..
Fairfield, Ia .....w. w.	2000	2190	1680	.07	.0765	153.30	128.57	70.00	85.50	..
Farmville, Va	2000	..	2160	..	.0424	..	91.58	$40.00†	..	..
Frederick, Md..... ..	2000	2190	2160	.0435	.0894	93.26	85.10	54.00	65.50	..
Fredonia, N. Y.....	2000	1460	.	.0594	..	76.50	..	48.50	58.50	..
Galion, Ohio.....	2000	2190	..	.0511	..	111.90	..	40.00	..	56.15
Galveston, Tex...	2000	2190	2700	.0557	.0318	121.98	85.86	70.00	..	85.30
Goshen, Ind.....w. w.	2000	2190	2168	.0518	.0480	113.34	104.64	68.00	81.75	..
Hannibal, Mo.....	2000	3150	2190	.0540	.0371	183.30	59.34	..	..	..
Hudson, Wis.....	1200	..	2303	..	.0331	..	48.76	36.00	42.00	..
Jamestown, N. Y.....	1200	2190	..	.0577	..	126.36	..	31.50	33.00	..
Lewiston, Me.....w. w.	2000	3000	2785	.0291	.0257	87.30	71.51	43.00	.. .	57.40
Little Rock, Ark..	2000	..	2168	..	.0308	..	109.05	43.00	50.0	..
Luverne, Minn.....	2000	..	1815	..	.0254	..	46.10	530.00	..	..
Marietta, Ohio ....w. w.	2000	2190	..	.0589	.05	97.31	..	33.75	42.00	..
Marshalltown, Ia..w. w.	2000	1460	1950	.0335	.0226	48.91	44.07	18.50	27.50	..
Martinsville, Ind..w. w.	2000	1460	..	.0464	..	67.74	33.00	41.33	..	..
Metropolis, Ill ....w. w.	2000	2190	1452	.0435	..	95.26	..	27.50†	..	33.80
Miamisburg, O.....	2000	2190	..	.0434	..	95.04	..	53.00	..	60.00
North East Pa.....	2000	1875	..	.0368	..	72.39	..	50.00	53.33	..
Painesville, Ohio	2000	1875	1388	.0390	..	73.12	72.60	44.25	53.50	..
Paris, Ill.....w. w.	2000	1875	..	.0533	..	97.06	..	40.00	45.50	..
Portsmouth, Ohio.w. w.	2000	2190	..	.0451	..	117.33	..	39.00	49.00	..
Shelby, Ohio.....	2000	2190	..	.0563	..	133.16	..	56.00	..	71.30
Savannah, Mo	1200	1460	..	.10	..	146.00	..	O†	..	14.35
Statesville, N C.... ..	2000	1875	..	.0355	..	66.56	..	40.00	..	53.50
St. Clairsville, Ohio.....	2000	3750	2382	.0269	.0233	100.87	53.94	38.00	..	53.50
St. Peters, Minn ..w. w.	2000	1460	..	.0757	..	110.53	..	O†	..	7.30
S. Norwalk, Conn	1500	..	2355	..	.0365	90.39	68.86	43.33	61.00	..
Topeka, Kas.....	2000	2500	.0430	....	....	107.56	74.00	37.00	..	..
West Troy, N. Y.....	2000	3750	2950	.0306	.0241	114.75	95.19	61.00	75.00	..
Ypsilanti, Mich....w. w.	2000	1460	..	.0664	..	96.94	..	36.00	..	54.49

* Electric works operated in connection with water works

† Profit on entire plant.

and official reports have been mainly relied upon. Mr. Foster, by his own showing, had not personally visited any of the plants concerning which he reports; Mr. Francisco appears to have visited but one of the sixty-four plants tabulated in his pamphlet, and Professor Parsons has apparently visited not more than five or six.

Now, I do not maintain that the correspondence method will fail to give accurate results. It depends upon the care and pertinacity of the investigator. In this respect Professor Parsons excels the other gentlemen. He has taken but little for granted and has made but few guesses. Mr. Foster makes many guesses at the rate of interest, cost of labor and fuel, number of hours burning and candle power. These two writers give the official figures wherever they have obtained them, and then their own estimates subsequently as computed and as printed in the above table. Mr. Francisco gives only occasionally the data for his computations and we are left to infer them from hints vouchsafed here and there. The principal difficulty in the way of securing sound results by correspondence is the impossibility of finding out and weighing the hundred and one local peculiarities which give tone and detail to the enterprise.

These often give a decided turn to the inquiry. Many of them cannot be presented statistically. For example, the village of Batavia, New York, by providing a council chamber in the building which houses its electrical plant saves $120 in rent each year, equal to $1.20 per arc light. Further, no one can appreciate the sense of relief from the exactions of private corporations and the civic pride and dignity of the citizens who have successfully overcome these exactions unless he visits them, talks with them and learns the history of their movement for municipal ownership.

AGREEMENT AS TO OPERATING EXPENSES.

In attempting to explain the wide discrepancies in these three methods of estimating the cost of municipal lighting we need to divide the cost of production into two parts, operating expenses and fixed charges. Operating expenses are usually stated by the officials of the various cities in the annual reports, and these with the annual output given, make it difficult to arrive at wide discrepancies in estimating the operating costs per lamp. This is evidenced in Table I, where the labor costs as given by Parsons and Foster are set side by side. In this item, as well as fuel, repairs and supplies, there is but little opportunity to go behind the returns unless one actually visits the plant and carefully compares item by item the labor, fuel, repairs and supplies actually

consumed with that which enters into the published reports. Consequently, we find these two authorities closely agreeing on operating expenses as will be further seen in Table III.

TABLE III.

COMPARATIVE ESTIMATES OF OPERATING EXPENSES PER ARC LAMP.

	FOSTER.	PARSONS.
Chicago, Ill.	96.50	96.50
Easton, Pa.	82.44	85.33
W. Troy (Watervliet), N. Y.	61.22	61.00
Dunkirk, N. Y.	47.28	46.00
Goshen, Ind.	67.85	68.00
Painesville, O.	49.42	52.50
Little Rock, Ark.	68.50*	42.00*
Aurora, Ill.	57.59	53.50
Fairfield, Iowa.	70.39	70.00

Mr. Francisco is an exception to this agreement. He vigorously attacks the published reports and discovers malicious attempts to transfer accounts, to misrepresent operating expenses and repairs as new construction, to charge electric light to other departments, and generally to bolster up a rotten business for the benefit of nobody but the politicians. I am unable to follow him in all his figures, as I have not been able to visit the plants whose accounts he criticises. But such evidence as I have been able to get seems to show that he is the wildest sort of a Don Quixote.

Mr. Francisco has also a sliding scale for depreciation. Where he thinks the operating expenses and interest charges of a municipal plant are high and do not need much inflation Mr. Francisco calculates depreciation at five per cent. as in Braintree and Swanton. But when expenses are low and a great cause is at stake, depreciation rises to eight per cent., and so South Norwalk, Detroit and many other places are saved. I mention only those places where he himself states the rate of depreciation. In other cases I am led to infer that it vibrates up and down usually near the eight per cent. pole, by comparing his figures with those of Mr. Foster, who uniformly estimates depreciation at seven and one-half per cent.

Perhaps too much space has been given to Mr. Francisco, but the space seems justified in view of the fact that he is quoted exten-

* Foster gives 132 arcs; Parsons 210.

sively by all who oppose municipal ownership. But the method adopted by Mr. Francisco of comparing the relative efficiency of the two systems on the basis of the candle power per hour furnished for one cent is vitiated by his reckless charges for depreciation and his liberties with the financial reports on operating expenses, as a comparison with Mr. Foster's figures shows in Table II.

BETTER QUALITY OF MUNICIPAL LIGHTING.

It is also to be remembered that there are two qualifications necessary before we can know that the candle power is relatively as great as it appears. These are the quality of the light and the "outages." In every municipal plant, almost without exception, the people of the locality are found on personal inquiry to speak in enthusiastic terms of the superior quality of light they are getting. Unfortunately this field of electric lighting has not been adequately tested, and but few cities, either with public or with private plants, have any record of photometric tests of the efficiency of their lights. The candle power is the "nominal" 2000 candle power of French standard, which Slingo & Brooker* estimate as giving actually only 875 candle power when the current is ten amperes and the voltage fifty, so that this amount of light is produced at a cost of 500 watts. As the usual power varies from 425 to 475 watts per lamp, and municipal officials never as far as I know are provided with photometric appliances, it is within the power of private companies to diminish the candle power below the standard required in their contracts. As long as exact measurements are lacking, we are compelled to depend upon the common opinion of the locality, which is indeed not an accurate judge. This general satisfaction of citizens in their light is one of those local factors which statistics cannot present, but which go far in determining the preference for municipal plants. Dunkirk is given by Francisco as furnishing 718 candle power per hour for one cent, but taking into account the fact that the dynamos there are run at eighteen amperes, and 520 watts are delivered to each lamp, and that the general impressions of citizens and visitors unite in describing them as the brightest lights to be found anywhere in street lighting, it is evident that, in addition to his juggling with costs, his estimate of quality also does injustice to the plant.

* *Electrical Engineering*, London, 1895, p. 594.

FEWER "OUTAGES" UNDER MUNICIPAL OWNERSHIP.

In the matter of "outages," too, the records for private plants are usually quite imperfect. Deductions are made from the contract price before payment is made by the city; but here is room for the political influence of the companies. The policemen are usually required to report outages, and in Syracuse the convenient practice obtains of reporting to the electrical company, which then report sto the city on their own outages.

For the City of Detroit the following comparison is made by the Public Lighting Commission of the outages under private and under municipal operation.

Table IV.

CONTRACTOR OPERATING 1,279 LAMPS, 1893-4.

Month.	No. Lamps Out.	Hours Out.	% Lamps Out.	% Hours Out.
October	1,819	6,895	3.396	1.500
November	1,372	11,988	3.575	2.455
December	2,710	20,485	6.835	3.967
January	787	4,304	1.985	0.884
February	2,898	17,642	8.092	4.181
March	1,177	5,317	2.942	1.270
April	1,729	8,980	4.506	2.551
May	1,278	4,888	3.211	1.548
June	1,679	6,102	4.375	2.186

CITY PLANT OPERATING 1,488 LAMPS, 1895-6.

Month.	No. Lamps Out.	Hours Out.	% Lamps Out.	% Hours Out.
October	152	1,040	0.335	0.201
November	95	774	0.266	0.187
December	138	940	0.300	0.154
January	47	372	0.116	0.068
February	43	301	0 098	0.059
March	28	235	0.061	0.048
April	84	350	0.179	0.088
May	63	288	0.138	0.080
June	25	137	0.056	0.048

It is also true that a steady improvement has been shown for the second year of municipal ownership, 1896–7, both in absolute amounts and relatively as well. A comparison of individual months shows the same superiority of public over private ownership. Not only does the city of Detroit get a steadier light but the brilliancy of the same is greater than that obtained from private corporations. The amount of the current used is maintained at 9.6 amperes, and the lamps burn at their full rated candle power.

Such facts as these not only may give us confidence that

municipal enterprise does better work than private companies in the field of electric lighting, but they also lead us to look with suspicion upon any statistics favoring private operation which are based upon candle-power cost, even if conscientiously compiled.

FAVORABLE COMMENTS OF OPPONENTS.

Turning now to the investigation of Mr. Foster we are at once impressed with its marks of candor and ability. Writing, as he does, under conditions opposed to public ownership, it is a matter of moment that he should publish such statements as these.

"The tone of all communications from those favoring the municipal side seems to have taken it for granted that the results shown would tell that side sufficiently well, and it must be admitted that in quite a number of cases such is the fact." Commenting upon the fact that the average cost per lamp of 2,000 candle power for installing a municipal plant complete is shown to be $249.30, and that this is very close to the price quoted by manufacturing companies to private purchasers, he remarks: "This is seemingly contrary to the commonly made statement, that municipal plants are not bought as cheaply as private, said to be due in a measure to 'jobs.' Perhaps these 'jobs' may be offset in the purchase of private plants by the commission sometimes paid some member of the company." Again, he says: "In all fairness it may be said that the much-vaunted better management in private hands does not exist. In fact, the men in charge of city plants compare quite favorably with those in charge of private plants of similar size." These statements seem to show that in his own mind, whatever conclusions others may draw from his figures, his carefnl investigation has not proven what its projectors intended, viz., a demonstration of the greater economy of private electrical lighting; and his figures themselves, as will be shown below, when rightly examined in the light of the facts and of statistical rules, are not only not a disproof of the claims of municipal ownership but a strong testimony in their favor.

THE UNITED STATES AND FOREIGN COUNTRIES CONTRASTED.

Mr. Foster agrees with what I have already stated above with reference to operating costs, *i. e.*, that there is comparatively little disagreement among the returns made by different investigators. In order to show this, he gives the following table from which fixed charges have been excluded.

TABLE V.

COMPARISON OF OPERATING EXPENSES PER KW.

	Labor per kw.	Fuel per kw.	Supplies and Offices per kw.	Total cost per kw.
14 American Municipal stations, street lamps only	$ .025	$ 1.0173	$ .0161	$ .0585
5 American Municipal Stations, Incandescent.....	.0244	.0226	.0126	.0596
1 American Municipal Station Arc, New.....	.0317	.0199	.0069	.0585
6 American Private Stations, Mixed Output of 5,300.000 kw...	....	.0095	...	.0473
5 German Stations, Output 1,907,900 kw.....	.0218	...	....	.0469
23 English Stations, Average, Crompton.....	.0144	.0232	.0194	.0560
Ideal English Stations, Crompton.....	.0040	.0054	.0170	.0264
Lowest Items in 23 Stations, Weaver.....	.0074	.0126	.0173	.0373

Mr. Foster says in commenting upon these figures; "Attention must be called to the remarkable agreement of cost in the American municipal stations, and the average of the English stations, and again to that of the six large American stations and the German average; both of the last two are equipped with large units in engines and dynamos, which probably accounts for the cost being lower than in the others." He says also, "The item of labor is the one division of operating expense in which it is claimed the greatest expenditure will be made in municipal plants. If the average here shown may be considered accurate within reason, this belief is largely a myth, for (with the exception of Chicago where labor is 53% of the operating expenses) the percentage for labor is less than usual in private plants. Either very low wages and very poor help are the rule, or the item has been classed wrongly."

It is when we come to the matter of "fixed charges," including interest, depreciation, insurance and taxes, that we find the widest divergences between the advocates and opponents of municipal ownership. It is here that almost the entire difference between the figures of Foster and Parsons is to be found. Mr. Foster estimates interest uniformly upon the entire cost of the plant up to date at the uniform rate of 6%, unless the officials have given him a different rate. As the actual rate is thus given in only sixteen of the thirty-four cities whose returns he has tabulated he has guessed at the rate of eighteen. In every case where I have been able to find the actual rate as against his guess, the rate is 4%. And it may be stated as a general rule that the smaller cities in the East can borrow money without difficulty at 4%, getting a premium on the bonds at this rate, and in the middle

West no higher rate than 5% is paid, rising to six and seven on the Pacific coast. Chicago borrows money at 3%, whereas Mr. Foster's gross interest charge for that city figures out 4.2%. A difference of 2% on the average investment of $250 per arc light makes a difference of $5 per year per arc in the aggregate cost.

INTEREST COMPUTED ON OUTSTANDING DEBT ONLY.

Prof. Parsons estimates interest not on the total cost of the plant as does Foster, but upon the actual amount of bonds outstanding. Therefore if no debt has been incurred for the electrical plant, or if the debt has been paid, interest entirely disappears from his calculation of cost. In cities without a debt on the plant, therefore, the difference between the total costs of Foster and Parsons would average $15.00 per arc lamp per year.

Parsons' reason for including interest not on the entire cost of the plant, but only on the outstanding debt, is that in municipal ownership the people pay interest to themselves, except where a debt makes a creditor in effect part owner, and therefore, to calculate interest on the total cost in excess of the debt would be only to take out of one pocket and put into another. This reason does not appear sound. Taxpayers and consumers are not the same individuals, except in street plants alone. The true economic principle seems to be as follows :

The taxpayers must pay for street lighting either to a private company or to a municipal plant. If the cost of the lamps operated by the latter, including interest, taxes, and insurance, is less than the amount that would be paid to a company, the difference is a saving to taxpayers which would not occur except with municipal ownership. If therefore, new construction and payments on the principal of the debt as far as met out of taxes, do not exceed the amount of this saving, such disposition of the taxpayers' money is not an assessment upon them, or an investment made by them upon which interest should be received, because they have no alternative investment and could not have gained interest upon it anyhow, but it is an administrative economy tending to the ultimate extinction of the debt and further lessening of taxes. The city of Detroit paid $175,000 yearly for 1,279 private lights, and now gets 1,716 arc equivalents for $144,000 including interest and lost taxes. The difference of $30,000 yearly, if put into new construction or a sinking fund, is

not an increased burden upon the taxpayers, and therefore does not give them a right to charge interest upon it to the consumers.

The city of Watervliet has, for seven years, furnished its 115 arc lamps at a cost of $75 each, including depreciation, but not interest. Its neighbor, Troy, has paid a private company $146 for like service. Watervliet's plant cost $26,000, but was paid for in two assessments without the issue of bonds. Distributed over the entire period, this investment would have been equivalent to $31 per lamp year, making the total expense to the tax payers $106, against the $146 paid by Troy. It is proper enough that interest should be omitted from the computation of Watervliet's annual expense, and, should a commercial system be added, the consumers should have the benefit of charges based on freedom from interest payments. Therefore, while criticising Professor Parsons' reasons, I agree that both he and city officials are right in figuring interest only on the outstanding debt. This gives the true cost of production to the taxpayers, and the saving of interest in this way must be counted as one of the most important economies which municipal ownership brings. This saving, of course, does not appear prominently in the early years of the enterprise, but it becomes increasingly valuable as fast as the debt is liquidated. Foster's computation of interest at six per cent. on the entire cost of plant to date is therefore doubly excessive, for, besides the falsely high rate, it includes interest on new construction paid out of profits and savings which are not properly considered an investment and entitled to interest payments.

EFFECT OF MUNICIPAL OWNERSHIP ON RATE OF TAXATION.

The amount of taxes paid by electric light companies varies so widely in different states and cities that it is impossible to state a rule that will have general application. Parsons says that the amount actually paid by the companies is about two dollars per arc equivalent or three-fourths of one per cent. to one per cent. on the fair investment. In New York city, according to the census report, it was one-third of one per cent. on the total valuation, or, omitting patents, six-tenths of one per cent. In the State at large it was one-half of one per cent.

According to the report of the Massachusetts Gas and Electric Light Commissioners the total amount of taxes paid by all the

electric light companies of the State for the year ending June 30, 1896, was $168,218.83, which was four per cent. of their gross receipts ($4,187,260), six and two-tenths per cent. of their operating expenses ($2,739,783), and 1.06 per cent. of their total assets ($15,892,336). The two Boston companies with the equivalent of 22,970 arc lamps of 2,000 capacity each, installed for both street and commercial lighting and motors, paid in 1896 taxes amounting to $72,333.96, being $4.42 per arc equivalent, and 1.05 per cent. on the combined assets of the companies ($6,898,786).

The Edison Illuminating Company of New York, with the equivalent of 42,582 arcs, installed in 1895, paid for "general and legal expenses and taxes," $218,421, equal to $5.13 per arc, showing taxes to be much less than in Boston.

The Detroit assessors at the request of the Public Lighting Commission placed an assessed valuation on the city plant at $427,500, the amount of the investment for the year having been $714,843.76. Computing city taxes on this valuation, the loss to the city in taxes was $7,981.43, or $5.10 per arc light, or one and one-tenth per cent. on the cash investment.

The Massachusetts rate of taxation on corporations is unquestionably higher than that in any other state, and the rate of one per cent. on the total investment may, therefore, be taken as the maximum taxes which the city loses through municipal ownership. But it is a mistake to consider this as a loss to the taxpayers. It is more than compensated by the increased valuations of property which follow upon increased municipal lighting. In Jamestown the extension of lamps to the suburbs, and to unimproved property, has contributed largely to the building up of outlying areas and the consequent increase of assessed valuation. Where there is a commercial plant the reduction of twenty-five to fifty per cent. in commercial rates increases the profits of business and hence the valuation of real estate and business holdings. This tends to lessen the tax rate. Altogether, we are justified in omitting the item of lost taxes entirely as an element in the cost of municipal lighting, but for the sake of the broadest possible treatment of the subject I have estimated it in the computations made in this article at one per cent. on the total cost of the plant to date. Were it omitted, it would reduce the cost per lamp per year as herein computed from $2.00 to $5.00 each.

SHOULD MUNICIPAL PLANTS BE INSURED?

Insurance actually paid is usually entered in operating expenses and need not be added as a fixed charge. It is a small

item, one-half of one per cent. in Batavia, nothing in Dunkirk, one per cent. in Watervliet, two-tenths of one per cent. in Jamestown, computed upon the total cost of the plant. The larger cities, Detroit and Chicago, do not carry insurance. This is proper enough for a large city where the loss by fire when spread over the tax rolls would cause but an insignificant increase in taxes, but small towns like Tipton, Iowa, whose plant was destroyed by fire, are unable to rebuild, especially if already in debt. In addition to carrying a small insurance, such towns should provide a sinking fund and depreciation fund which are in a way a sort of insurance.

RATE OF DEPRECIATION OF ELECTRIC PLANTS.

Depreciation is the item of keenest dispute in the contest over municipal electric lighting. Mr. Francisco quotes electrical engineers who assert that the depreciaton on engines and boilers is 5%, on electrical apparatus lamps and dynamos 10%. He does not itemize any other parts of a plant, and taking these two the depreciation for the first year on the *total cost* of the Detroit plant would be 1.4% as follows, instead of 8%. as usually estimated by him.

TABLE VI.

ESTIMATED DEPRECIATION ON DETROIT MUNIPICAL PLANT 1895-6.

	Cost.	Rate per cent. of Depreciation.	Amount of Depreciation.
Steam plant	$82,152	5	$4,107
Arc lamps	29,628	10	2,962
Electric plant	40,842	10	4,084
Balance of entire plant	477,519	0	0
Net cost of plant to date	630,141	1.4	9,153

Professor Parsons arrives at his estimate of 3% depreciation in the following way, taking the Braintree plant as an example.

TABLE VII.

BRAINTREE—DISTRIBUTION OF INVESTMENT AND DEPRECIATION.

	Investment.	Per cent of depreciation.	Amount of depreciation.
Land	$ 940	0	$ 0
Buildings	6,680	1	66
Steam plant	11,900	4	476
Electric plant	7,640	3	229
Lines	18,580	1	186
Poles	3,630	10	363
Lamps	4,680	4	185
Meters	1,560	2	31
Transformers	2,280	3	68
Tools and furniture	580	8	46
Supplies	610	0	0
Services of architect and engineer	620	0	0
Total	54,600	2.9	1,600

For an underground plant like that of Chicago, he figures the depreciation at one and six-tenths per cent. of the total investment, as follows:

TABLE VIII.

CHICAGO—DISTRIBUTION OF INVESTMENT AND DEPRECIATION.

	Investment.	Per cent. of depreciation.	Amount of depreciation.
Land	$100,000	0	$ 0
Buildings	66,987	1	669
Steam Plant	95,518	4	3,820
Electric Plant	58,075	3	1,742
Lines	317,040	1	3,170
Poles	.....	....	....
Lamps	41,240	4	1,650
Tools and Furniture	610	8	50
Supplies	8,840	0	0
Total	$688,310	1.6	$11,101

APPLICATION OF DEPRECIATION FUNDS.

The above estimates for depreciation are of course not actually written off by the municipal officials, but are calculations made by Mr. Parsons. In fact it is almost invariably the rule that the managers of municipal plants make no allowance whatever for depreciation.

It is not to their discredit, however, as compared with private corporations. Mr. Foster says (p. 184): "It is but fair to say that in a comparison of municipal with private plants, the charging off for deprecia-

tion and interest, is fully as much neglected by one as by the other; less than one in ten of either paying any attention whatever to these items." The report of the Massachusetts Gas and Electric Light Commissioners shows that in 1896 the Electric Light Companies of that State set aside for depreciation funds $446,662.89, which was three per cent. of the total assets of the companies. $250,000 of this was credited to one company, the Boston Electric. Of the eighty-three companies in the State, only thirty-three made an account of depreciation, and, apart from the Boston Electric, whose depreciation was eight per cent. of its assets and fifteen per cent. of its capital stock, and the Edison of Boston, whose depreciation was two and eight-tenths per cent. of the capital stock, and two and three-tenths per cent. of the assets, the depreciation entered by the other thirty-one companies was less than one-half of one per cent. The Edison Illuminating Company of New York in 1894 for the first time carried a part of its profits to a depreciation fund, and the directors, remarking upon the novelty of the transaction, wrote: "This conservative course will no doubt commend itself to the stockholders."

As to these private companies, it does not follow, because they carry a depreciation fund, that they have actually written any depreciation off from their capital investment. The proper method would be to deduct depreciation from the capital and to add new construction, giving at the end of each year a new net capital investment, but as the companies are usually stocked and bonded at a high figure, it is of some advantage to them to keep adding new construction to their construction accounts without deducting depreciation, thus actually inflating their apparent investments. The depreciation fund which they carry is therefore merely a part of a larger policy which conservative corporations adopt, namely, the accumulation of a surplus in the treasury of the company rather than the distribution of this surplus in dividends to stockholders. This surplus may be invested in stocks and bonds of its own, or of other companies, or may appear in several different forms, such as profit and loss, depreciation fund, reserve fund, or insurance fund. By a policy of this kind the stockholders, though getting smaller dividends for the time, are nevertheless, while keeping up their plant by repairs, renewals, new construction, and operating expenses, increasing the market

value of their stock, and their capacity to buy up and absorb other corporations and competitors, besides also giving added security to their bonds, and increasing the company's ability to borrow money at low rates.

Now, these conditions are wholly absent from a municipal corporation owning and operating an electrical plant. The taxpayers do not hold negotiable stock in the plant, which they may wish to hypothecate and so desire to have it backed by the possession of a reserve fund. They do not want the electrical plant to accumulate a surplus to be invested in securities against either future extensions of the business or replacements of worn-out machinery. The city is not a business corporation empowered to re-invest the earnings of its stockholders, the taxpayers; but the latter want to re-invest their own money in their own way and under their own individual control. Hence they want their dividends at once for private purposes in the form of *low taxes or low charges*. This leaves no room for the accumulation of a reserve by whatever name it may be known. If the municipality is to take account of the depreciation at all it is not in the form of a surplus fund on which the future taxpayers may draw in case of exigency, but it is in the form of such a provision for the distribution of depreciation over successive years that the taxpayers of no single year will be unduly oppressed. This will appear more clearly if we consider the true nature of the depreciation.

EXTENT OF DEPRECIATION.

There are three kinds of depreciation to be taken into account —depreciation by *use*, depreciation by *competitive improvements* and depreciation by *replacements*,

Depreciation by use is the actual wear and tear upon machinery, the burning out of armatures, the breaking of globes and lamps, the crippling of tools, the weathering of paint, poles, lines and so on. This kind of depreciation is entirely covered by the item of repairs and renewals, properly chargeable to operating expenses, and is so entered by every honest official. It does not need additional provision under fixed charges. However, it eventually contributes to the third form of depreciation, that of replacement.

Depreciation by competitive improvements consists in the lower cost of operation and maintenance which new inventions and im-

proved machinery have introduced since the installation of the plant. It is asserted now that the saving effected in arc lighting by substituting 100 and 125 arc dynamos for the thirty-five and fifty arc dynamos of the earlier days is 40% of the maintenance. In the direct-current service the large units effect a saving of 20%, which is increased even to 50% by being directly connected to the shaft of the engine instead of being belted. In alternating currents the difference is less, but the lower speed, lower temperature and ability to run continuously make their adoption a commercial gain. Such striking improvements in electrical machinery within ten years render the plants of that length of service quite antiquated. Were the business a competitive one and readily open to new companies there could be no question that the private plants installed a few years ago would all now be bankrupt, in so far as they have not met the improvements of the day by substituting new machinery. But having a monopoly and being able to charge the prices of a decade ago they are protected in the use of antiquated machinery and need introduce the new appliances only with the extension of new business. This kind of depreciation in a competitive business would be corrected by writing off depreciation from the capitalization, and the market value of the stock would sink gradually until bankruptcy or reconstruction ended it. But in a monopolistic business the power to keep up old rates is the power to withstand the pressure of competitive improvements. This is the very reason why in such a business municipal ownership, or at least municipal regulation of charges is demanded. And if the municipality, in case of ownership, did not choose to put in the new machinery before the old should wear out, the consumers certainly would be no worse off than with private monopoly. Certain it is that the charges by private companies for either public or private lighting have not fallen in proportion to the great improvements in production even where the companies have been enterprising enough to replace the old by the new machine. It is this kind of depreciation by competitive improvements that experts have in mind when they place depreciation at 10%. For certainly the life of a dynamo is equal to the life of an engine if it be equally well cared for and if repairs are made as needed, and the depreciation by use in either case would not shorten the life of the apparatus to less than thirty or

forty years. This kind of depreciation is not to be computed as a fixed charge, since it already shows itself in operating expenses by high cost of fuel, labor, repairs, &c.

Depreciation by replacement occurs as a result of the other two forms of depreciaton, when old machinery through wear and tear and in view of improvements is sold out and new is put in its place. When this shall occur depends upon the policy of the management. A few enterprising private companies have already begun to reconstruct their electrical plants, not because of depreciation by use nor by competition, but because the saving with new improvements more than covers profits on the cost of reconstruction. As a rule, however, in a monopolistic business of this kind replacement does not occur until depreciation by use has advanced so far that repairs and renewal of minor parts fail to maintain the efficiency of the plant. Whether in the case of a city or a company, the financial circumstances of the owners determine how long they shall wait before selling the old and substituting the new. On this basis it will be safe on the whole to estimate that the entire depreciable part of the plant, including steam and electric plants, poles, lines, meters, transformers, lamps, should be replaced every twenty to thirty years. This replacement would not occur all at once, but would be distributed throughout the period.

MUNICIPAL DEPRECIATION FUNDS UNNECESSARY.

We can now make plain another reason why a city need not accumulate a depreciation fund and why a private company must do so. In a city the entire taxable property of the citizens is liable to assessment when the time arrives for purchasing new machinery in place of old, while in a private company only the capital actually invested is so liable. In the former case therefore the increased tax rate for replacements would be so insignificant as to need almost no consideration; in the latter it would wipe out the dividends and reduce the capital stock to a mere speculative interest. For example, the assessed valuation of taxable property in Detroit is $209,586,330. The tax rate for all purposes is fifteen and seven-tenths mills on the dollar. The entire lighting plant cost $729,222. The electrical part of the plant cost $63,701. Supposing this part were to be entirely replaced in a single year the tax necessary for the purpose would be only three-tenths of

one mill, which would increase the tax rate from fifteen and seven-tenths mills to sixteen mills. If the same assessment were levied on a private company which had invested $730,000 in the enterprise the rate would be eight and seven-tenths per cent. (eighty-seven mills on the dollar). But the entire electric plant would not need reconstruction in a single year. Its replacement, together with that of the entire depreciable part of the plant, could be distributed over say twenty years. This depreciable part of the Detroit plant is $431,186, making $21,559 to be replaced each year. On the entire taxable property of the city this would be a rate of only twenty-six one-hundredths of a mill, bringing the total rate to 15.96 mills. On the private capital invested this would be a tax of three per cent. or thirty mills on the dollar. But this is not all. The private plant would, of course, be bonded for one-half its value, and the interest on the bonded debt at six per cent. would be a prior lien on the earnings. Consequently, the cost of replacement would come out of the stockholders representing but one-half the investment. The assessment on stock for replacing one-twentieth of the depreciable plant would, therefore, be six per cent. as against the twenty-six one-thousandths of one per cent. which the taxpayers would be assessed. The capital stock in the one case would be wiped out, but in the other the taxpayers would be unaffected. Even this comparison is unfair to the city of Detroit, for it must be remembered that in 1893 and 1894 the tax on property for lighting by a private company was $175,000 yearly for 1,279 lamps, while now it is only $144,000 yearly for all operating expenses and interest on 1,700 arc equivalents. This leaves a balance of at least $30,000 yearly, minus sinking fund and new construction without considering the increased lighting, on which to draw for replacements when needed, before the expense can be said to approach that of private lighting. Under such circumstances I do not see how the municipal authorities can be charged with "bad bookkeeping." Judged by private standards they could be so charged, and those thousands of private companies which are now distributing what ought to be their reserve funds in dividends to stockholders are either presuming upon their power to force the public to pay for replacements when they come, or their shrewdness in bolstering their stock and entrapping future innocent stockholders who in turn must reckon with the municipalities.

Below is a table showing the facts just stated concerning Detroit, together with comparative tables for smaller places. It will be seen that small places with heavier investments relative to taxable property than Detroit must incur a heavier tax rate for replacements. This rate is five-tenths of one mill in Braintree and seven-tenths of one mill in Reading, Mass., two and three times the estimated rate in Detroit. But the Braintree and Reading plants are both commercial and street plants, and this brings in a new consideration, namely, the relations between taxpayers and consumers in the maintenance of the electrical works.

Table IX.

COMPARATIVE BURDEN OF REPLACEMENTS ON MUNICIPAL AND PRIVATE CORPORATIONS.

	Detroit. Street Plant. 1897.	Braintree. Street and Commercial. 1894.	Reading. Street and Commercial. 1896.	Braintree. Street Plant. 1894.
Total valuation of taxable property	$209,586,880.00	$4,424,225.00	$3,206,466.00	$4,424,225.00
Tax rate on $1.00	.0157	.0172	.0155	.0172
Total investment	729,222.00	54,600.00	67,698.00	30,160.00
Total cost Electric Plant.	63,701.00	7,640.00	7,026.00	2,740.00
Tax rate on $1.00 necessary to replace electric plant entire	.0008	.00172	.0022	.0006
Assessment on capital invested necessary to replace electric plant	.087	.14	.103	.091
Total cost of depreciable plant—machinery, posts, lamps, lines	431,186.00	45,820.00	43,991.00	21,880.00
Tax rate on $1.00 necessary to replace 1/20th of depreciable plant	.00026	.00050	.0007	.00024
Same added to existing rate	.01596	.01770	.0162	.01804
Assessment on capital of private company (stock and bonds) invested, necessary to replace 1/20th of depreciable plant	.03	.042	.032	.035
Assessment on capital stock alone (estimated at 1/2 total capitalization)	.06	.084	.064	.07

COST UNDER PUBLIC AND PRIVATE OWNERSHIP.

Heretofore, I have considered only those cities in which the municipal plant is limited to street lighting. In such cities the taxpayers alone are concerned as to the charges for depreciation. But the inevitable tendency of municipal ownership is to enter the commercial field. Every one of the municipalities owning plants in Massachusetts has already added or voted to add this branch to its municipal plant. The advantages to the citizens in taking this step are so patent and unquestionable that when a municipal plant has once been installed they become restless under private commercial lighting. The city of Jamestown, New York, added its commercial plant after the street plant had been operating a couple of years, and one large consumer who had been paying $1,400 a year for lighting now gets his light from the city for $900. A prominent social club had been paying $450 yearly for lighting its rooms. In order to retain its custom the private company has reduced the charge for the same light to $120 a year. Lansing, Michigan, bought out the private plant and reduced rates at once from twenty cents per kw. to eighteen cents and again to twelve cents in two years. The following table gives the comparative charges for commercial lights under public and private ownership :

The figures for Massachusetts are taken from the Report of the Gas and Electric Light Commissioners. Those for cities outside Massachusetts are from reports made to me or to the South Norwalk investigating committee, or they have been collated by Mr. Parsons in the *Arena*, August, 1895.

TABLE X.

COMMERCIAL RATES FOR INCANDESCENT LAMPS—16 CANDLE POWER.

	Municipal Plants.				*Private Plants.*			
	Per Month.	Lamp Hour.	Per Kw. Hr.		Per Month.	Lamp Hour.	Per Kw. H
Braintree, Mass.		6/10c.		Abington, Mass.		9/10c.	12c.
Chicopee, "			11.55c.				
Hingham, "			20c. yearly. 25c. summ'r	Adams, "	6 nights. Per wk. $1.00.	1c. amp. hr.	20c.
Hull, "	60c.	1c. amp. hour.		Amesbury, "	90c.		
Marblehead, "		¾c. y'r'ly 1c. summer.		Amherst, "			20c.
				Andover, "			24c.
				Athol, "			20c.
Middlebr'gh, "		1c.		Attleborough, Mass	90c.		25c.
N. Attlebr'gh, "		¾c.					
Reading, "		¾c. 1¼c. amp. hr.	15c.	Beverly, "	1.16 2/3 for 7 nights. 1.00 for 6 nights.		25c.
Wakefield, "	90c.	9/10c. amp. hr.					
Jamestown, N. Y.	67¼ c. all night 40c. to 10 P.M.		9c. dwellings. 10¼ factories.	Block Plant, "			18 2/3c.
				Blue Hill, "	$10 pr. yr.	1c.	
Lansing, Mich.	75c.		12c.	Boston, "		1c.	20c.
Johnson, Vt.		1/3c.		Bridgewater, "		1c.	20c.
Griffin, Ga.			12c.	Lansing. Prior to 1895.	75c. to 9 P.M. 1.00 to 12 P.M.		
Logansport, Ind.			7c.				
Webster City, Ia.	(av.) 33c.		10c.				
Lisbon, Ia.	40c.	¾c.		Syracuse, N. Y.			10c.
St. Charles, Ill.	50c.		15c.	Little Rock, Ark.		1c.	
Benton, Ill.	50c.			Colorado Sp., Col.		1c.	
Harrington, Kas.	75c.			Leadville, Col.	$1.	1¼c.	
Tecumseh, Neb.	$1.25 (1st 2) 50c. (above 4)			Logansport, Ind.		1c.	
				San Jose, Cal.		1¼c.	
				Baton Rouge, La.	50c.		
Savannah, Mo.	50c.		15c.	Marseilles, Ill.	40c.		
Fulda, Minn.	50c.			Chicago, Ill.		1c.	
Salisbury, Mo.	10 P.M. 60c 12 P.M. 80c	1c.	20c.	Wichita, Kas.		1c.	
				Topeka, Kas.		1c.	
Alexandria, Minn.	65c.		15c.	St. Louis, Mo.		1-1¼c.	
Waseca, Minn.			15c.	Duluth, Minn.		1c.	
Luverne, Minn.			10c.	Springfield, Mo.		1c.	
Wells, Minn.	50c.		10c.	Bath, Me.		1c.	
Litchfield, Minn.	40c.	2/3c.		Birmingham, Conn			25c
St. Peters, Minn.	9 P.M. 50c. 12 P.M. 65c		12½c.	Omaha, Neb.			20c.
				Binghamton, N.Y.		1c.	
Rochester, Minn.		½c.		N. Y. City, N. Y.		1c.	
Marshall, Minn.		6/10c.		Brooklyn, N. Y.		1c.	
Coldwater, Mich.		6/10c.	11c.	Cincinnati, O.		¾c.	15c.
Evart, Mich.	35c.			Mt. Holly, N. J.		½c.	
Hamilton, N. Y.		1½c.		N. Brunswick, N. J.		5/10	18c.
Westfield, N. Y.	50c.	½c.		Washington, D. C.			15c.
Madison, N. J.			10c.	Philadelphia, Pa.		¾c.	15c.
Hamilton, Ohio.	60c.		8c.	Harrisburg, Pa			15c.
Jackson, Ohio.	60c.		10c.				
Willoughby, Ohio.	(Stores) 25c.		8c.				
DeGraff, Ohio	25c.-40c.	6/10c.		Wilmington, Del.	10c. not over 1hr., $1 lamp 60-80c. for 3 or more.	6/10c.	
Galion, Ohio.	70c. to 10 lamps 65c. to 16"		10c.				
Quakertown, Pa.			12c.				
Schuylkill Ha'en, Pa	25c.-65c.						
Sharpsburg, Pa.			8c.				
Wytheville, Va.	25c-50c 75c all night.						
Salem, Va	40c.-65c.		20c.				
Rice Lake, Wis.	50c.		20c.				

A comparison of these rates shows that private companies charge for commercial lighting fifty to one hundred per cent. more than municipal plants. The lowest meter rate charged by private companies is in Syracuse—ten cents per kw.—whereas the usual rate is twenty cents per kw., or its equivalent, one cent per meter hour. The lowest rate charged by cities is three-tenths of a cent per lamp hour in Newark, Delaware, but the usual rate is one-half cent per meter hour, and seven to ten cents per kw.; and thirty-five to fifty cents per month against seventy-five to one dollar and twenty-five cents per month with private companies.

TABLE XI.

NET COST OF PUBLIC LIGHTING PER KW. TO CITIES HAVING COMMERCIAL PLANT.—FOSTER.

CITY.	Cost per kw. for total output.	Net cost per kw. used by City after deducting Commercial Lighting.	Cost to Cities by Private Companies.
Santa Cruz, Cal.	$0.2478	$0.2030	$0.115
Portland, Ore.	.0960	.0918	.077
S. Norwalk, Conn.	.0528	.0019	.081
Frederick, Md.	.0569	.0565	.058
Metropolis, Ill.	.1894	.1770	.091
Council Grove, Kas.	.0884	.0259	.068
Arlington, Minn.	.0975	.0149	.046
Crawfordsville, Ind.	.0758	.0680	.078
St. Clairsville, O.	.1540	.2160	.104
Little Rock, Ark.	.0561	.0011	.041
High Point, N. C.	.1470	.1760	.065
Marshalltown, Ia.	.0483	.0617	.060
Alameda, Cal.	.0565	.0734	.123
Ashtabula, O.	.1095	.1870	.168
Blue Island, Ill.	.0956	.1294	.095
Averages.	.1009	.1105	.086
Same in lamp hours, 2,000 cp. 480 watts.	.0484	.0579	.041
Total cost per lamp hour 2,000 c. p. for street plants alone.	.0444		

That municipal rates are much lower than private rates is beyond question. Mr. Francisco cannot disprove it either by screwing the figures or inflating depreciation. He therefore complains that the taxpayers are being oppressed for the benefit of the consumers; and Mr. Foster gives a table showing that where the city does commercial lighting, the net cost to the city for its street lights is greater than where it does street lighting alone, which is explained, he says, by the extremely low prices for commercial work. The table is reproduced herewith.

I will show below how this table is compiled and of how little value it is. Suffice it here to say that the cities doing commercial lighting very generally report that their street lights cost them,

net, much less on account of the commercial profits than they did without the latter.

PROFITS VS. REDUCED COST.

In the operation of a commercial plant it is a question of policy whether the city shall make a profit and so reduce the cost of street lighting to the taxpayers, thus taxing consumers for the benefit of taxpayers, or shall furnish the light to consumers below cost, thus taxing the taxpayers for the benefit of consumers. I assume that the nearest approach to justice is attained when each service pays its own way. Consumers should pay for what they get at its net cost price, and taxpayers should pay for street lamps at their cost. If this principle be adopted, depreciation should be charged under the operating expenses of the plant, and should be actually written off from the capital from year to year; the taxable property of the city should be assessed a fixed rate per lamp for all street lamps, the proceeds of which should be debited by the electrical administration as regular income along with the commercial income, and from the two together should be deducted operating expenses, leaving a "profit and loss" or "net revenue" account, which in turn should be credited with interest on bonds, depreciation and sinking fund. (1)

Our cities are justly charged with inferior and loose business methods, and nowhere is reform more needed than in the bookkeeping. Fair-minded opponents agree that the city has the advantage in operation of industry, especially in the low rate of interest which it pays on loans, and the strength of their argument lies solely in attacking the looseness of methods and the incompetency, not to say corruption, of officials. Admitting that their attack is in most cases justified, the advocate of city owner-

(1) An admirable example of this method of municipal bookkeeping may be found in the electric light accounts of the city of Aberdeen, Scotland. Upon consultation, one will find that the city is charged for fourteen lamps, consuming 11,057 kw., £209 8s.5d. which is a rate of 9.1 cents per kw. for public lighting, while private consumers are charged 10 cents (5d.) per kw. It will also be seen that depreciation is charged at 5% on machinery and meters, 2½% on electrical instruments, 1½% on mains and 1% on buildings, making an aggregate for the year 1896 of £844 19s. 7d., or a total rate on the entire expenditures at the beginning of the year of 2.7%. Furthermore, by examining the "state of capital account" from 1894 to 1896 it will be seen that at the balancing of each year's accounts new construction is added and depreciation written off, so that the net balance at the close of 1896 is £34,780 5s. 5d. instead of £36,690 15s. 9d. the aggregate expenditure.

ship must point the way to a remedy or abandon his cause. The first step is better methods of municipal bookkeeping. It becomes especially urgent when the city enters upon the field of commercial lighting, and it becomes important to apportion properly the expenditures between taxpayers and consumers. This urgency increases with the size of the city, where consumers outnumber taxpayers. We may conclude that as far as bookkeeping itself is concerned, a depreciation of three per cent. on the total cost of the plant is ample to cover costs, and on this basis the rates to consumers should be fixed. Three per cent. on the entire capital, compounded at four per cent.—the rate of interest paid by cities—would replace the principal every twenty-one years. This rate is amply justified not only by the Aberdeen accounts, but also by the figures of other European cities. Glasgow, without carrying insurance, wrote off depreciation in 1894 of three and seven-tenths per cent.; in 1895 of three and nine-tenths per cent.; in 1896 of four and eight-tenths per cent.; Dublin, in 1897, nine-tenths of one per cent.; Bradford, 1897, two per cent.; Manchester, 1897, wrote off a depreciation of £5,000, equal to one and six-tenths per cent. on the capital of £309,190, but from this amount deducted repairs and renewals of £1,692 19s. 8d., leaving a net depreciation of £3,307 0s. 4d., equal to one and one-tenth per cent. The strong conservatism of these English cities makes it quite certain that they have placed depreciation at the highest rate justifiable.

FOSTER'S ESTIMATES EXAGGERATED.

When, now, we proceed to compare the cost of public with private lighting we see how greatly exaggerated is the estimate of Mr. Foster. He indeed does not make computations for lost taxes, but since this item cannot exceed 1%, and probably should be excluded altogether, and since insurance is included in operating expenses of all the small plants which he examined, his rate of 7½% for depreciation is fully double a reasonable rate. Mr. Parsons, who makes fixed charges 5% to cover depreciation, insurance and lost taxes is certainly sufficiently liberal to the opponents of municipal ownership.

The exaggerations of Foster's estimates appear yet more clearly when he compares directly the costs under public ownership with the costs under private ownership. He compares the total cost per lamp hour of the fourteen cities of his investigation

which had street lighting plants alone with fourteen other cities having private plants.* His *averages* apparently show that in municipal plants the cost to the city is 1.86 cents higher per hour than in the private plants. But the table is worthless both in method and in fact. 1. Every statistican knows that in getting averages extreme and exceptional cases should be omitted. In these fourteen municipal plants there are three exceptional cases. Alameda, Cal., where he himself says the high cost "throws doubt on the accuracy of the figures"; Fairfield, Ia., a diminutive plant with but fourteen arcs and no commercial lighting; and Anderson, Ind., a plant using natural gas. Two of these cities have exceptionally high costs and one has exceptionally low costs. Excluding them, the average would be 4.13 instead of 4.44 cents per lamp hour. 2. His rate of interest for municipal plants is six per cent. which is fifty per cent. above the correct rate. 3. This rate is computed upon the total cost of plant to date, including new construction paid out of taxes. It should be computed only on the outstanding debt. 4. His rate of depreciation is seven and one-half per cent. which is one hundred per cent. above the true rate. 5. He selects fourteen private plants for comparison which he says are similarly situated (giving no names). But this is impossible, for private plants have always commercial lighting as well as public lighting, and they usually give a lower rate to the city than to private consumers. They can well afford to do so, for thus they keep their hold on the private citizens. The usual method of judging the companies by their rates to the city overlooks the way in which they are depriving the people at large of the advantages of electricity. In Table XI. Mr. Foster selects sixteen private plants the average cost of whose lights to the cities is $.086 per kw. hour ($.041 per lamp hour), instead of $.0358 per lamp hour.

Taking the first, second and fourth of these criticisms into account and omitting the others I have drawn up the following table, using the data supplied by Foster himself; and by the side of the estimates which he has made for the fourteen city plants in question I have placed three trial columns showing what would be the cost per lamp hour: first, with interest at four per cent. (the actual rate), and

* See Table XII, columns 1, 3 and 7, which show according to Foster that the average cost per lamp hour in public plants is $.0444 and in private plants $.0358.

depreciation at seven and one-half per cent. (his rate); secondly, with interest at four per cent., and depreciation at five per cent.; thirdly, with interest at four per cent., and depreciation at three per cent. I have also estimated again for each of the four columns what would be the true averages if the three exceptional cases were omitted. It will be seen that even with depreciation at seven and one-half per cent., as he claims it should be, the average cost to cities is only $.0351 when exceptions are omitted and interest is put at its true rate of four per cent. By the other estimates it is much lower. Thus while Mr. Foster has been candid, a correction of his inexcusable guesses and mistakes of method demonstrates with his own data the decided superiority of the municipal plants.

TABLE XII.

COMPARATIVE COSTS AT DIFFERENT RATES OF INTEREST AND DEPRECIATION PER LAMP HOUR.

1 Cities.	2 Rate of Interest given by Officials to Foster.	3 Foster's Estimate. Interest 6 %. Depreciation 7½%.	4 Same with Interest 4 %. Depreciation 7½%.	5 Same with Interest 4 %. Depreciation 5 %.	6 Same with Interest 4 %. Depreciation 3 %.	7 Total Price by Contract with Fourteen Private Plants, names of cities not given.—Foster.
Goshen, Indiana.....	....	$0.0480	$0.0459	$0.0426	$0.0403	$0.055
Lewiston, Maine.....	....	.0257	.0246	.0231	.0216	.052
Easton, Pennsylvania....	4	.0413 (4 %)	.0413	.0388	.0359	.026
Frederick, Maryland.....	....	.0319	.0372	.0345	.0323	.055
Fairfield, Iowa.....(1)	....	.0765	.0712	.0648	.0597	.053
Anderson, Indiana....(1)	....	.0150	.0141	.0127	.0120	.025
Little Rock, Arkansas...	....	.0503	.0448	.0413	.0385	.032
Marshalltown, Iowa.....	....	.0226	.0207	.0188	.0162	.033
Alameda, California...(1)	5	.1240	.1229	.1145	.1004	.029
Painesville, Ohio.....	....	.0395	.0392	.0366	.0347	.035
Chicago, Illinois.....	....	.0430	.0410	.0371	.0337	.032
Elgin, Illinios.....	5	.0400	.0391	.0372	.0348	.028
West Troy, N. Y.....	....	.0241	.0225	.0212	.0199	.033
Bay City, Michigan.....	....	.0308	.0300	.0279	.0262	.033
Averages.....		.0444	.0425	.0393	.0361	.0358
Extremes omitted.		.0413	.0351	.0326	.0304	....
Candle Power per 1 cent.		484	570	618	658	559

(1) These are omitted under "extremes omitted."

Similar corrections also show that in cities with commercial plants the net cost of public lighting, instead of being $.1105 per kw. hour ($.0579 per lamp hour), is only $.0668 per kw. hour ($.0319 per lamp hour), and is therefore less than when the city has street lamps alone, and is less than the price paid to the private companies, which Foster adduces, by $.0192 per kw. hour ($.0091 per lamp hour), a difference of twenty-two per cent. in favor of the municipal plants. The table is reproduced here with these corrections.

TABLE XIII.

Comparative Estimates of Net Cost per Kw. of Public Lighting for Cities having Commercial Plants.

Cities.	Rate of Interest reported by officials to Foster.	Total cost per kw. for total output. Foster.	Net cost per kw. used for city lamps, after deducting commercial income.	Same, with interest 4%, depreciation 7½%.	Same, with interest as given and depreciation 5%.	Total cost by contract with private companies, names not given.—Foster.
Crete, Neb.	..	$ 0.2478	$ 0.2620	$ 0.2489	$ 0.2220	$ 0.115
Chehalis, Wash.	8	.0960	.0913	....	.0837	.077
Luverne, Minn.	7	.0528	.0019	....	—.0314(1)	.061
Dunkirk, N. Y.	..	.0569	.0565	.0546	.0449	.053
Shelbina, Mo.	7	.1324	.1770	....	.0417	.091
Farmville, Va.	6	.0884	.0959	....	.0413	.063
Rock Port, Mo.	6	.0975	.0149	....	—.0082(2)	.046
Hope, Ark.	..	.0758	.0880	.0685	.0507	.078
Arlington, Minn.	..	.1540	.2160	.2036	.1282	.104
Falls City, Neb.	5	.0561	.0011	....	—.0093(3)	.041
Madison, Ga.	6	.1470	.1760	....	.1620	.065
St. Clairsville, O.	5	.0483	.0617	....	.0540	.060
Hannibal, Mo.		.0565	.0784	....	.0585	.123
Quakertown, Pa.	4	.1095	.1870	....	.1701	.163
West Field, N. Y.	4	.0956	.1294	....	.1225	.095
Averages		.1009	.1105	....	.0668	.086
Same in lamp hour, 2000 c. p.		.0842	.0579	....	.0319	.041
Candle power per one cent.		237.	345.	....	627.	488.

(1) Profit, $325. (2) Profit, $160. (3) Profit, $300.

DETROIT AND CHICAGO CONTRASTED.

The foregoing analysis of Mr. Foster's statistics is enough to show that the actual results of municipal lighting are superior to those of private operation. The estimates made in the last two columns of Table II. may be considered as marking the extreme cost of municipal lighting, including, as they do, every reasonable charge, and allowing from two to four per cent. more for fixed charges than the facts really demand. In addition to the preceding discussion, I present the following comparisons of interest:

The municipal plant in Detroit for the year ending June 3, 1897, reports the actual cost of 1,564 arc lamps, including interest, depreciation and lost taxes, at $89.42 per year. There were also 3,064 incandescents, making a total of 1,716 full arcs, on the basis of the kw. hours of output. The total cost, including interest, four per cent., and other fixed charges, five per cent., was $171,883.56, equal to $100.16 per arc equivalent. I am convinced that this estimate is too high for Detroit, because the underground construction should bring depreciation below three per cent.; also, the cost of the plant, $714,843.76, is $416.57 per arc equivalent, which is $134.07 in excess of the Allegheny plant ($282.50 per arc equivalent), and probably $200 in excess of the cost in private plants which have commercial lighting. The high cost includes underground construction, built in anticipation of future growth of the city. Taking these into account, the estimate of the Commission at $89.42 is more nearly just.

The municipal plant of Chicago was reported by the city electrician in 1896 as furnishing arc lights at a cost of $96.40 for operation. I am informed by the comptroller that the present city electrician thinks this estimate is incorrect "for the reason that not enough is included for the maintenance of the lights and there is no allowance made for the office expenses. He has made a separation of the charges and added in the amounts which have been omitted, and finds that the lights actually cost the city about $117 per light per year," not including fixed charges. Since July 1st, 1897, however, the present electrician figures the average cost per light per month at $7.35, including "a fair proportion of office expenses, all repairs and improvements in stations and circuits and all the operating charges. The estimate of the cost per light per year will not exceed eighty dollars, and he has hopes of making it still lower next year. He does not figure any interest on the money invested. A full 2000-power electric light is furnished, and reports show that the lights are operated a greater number of hours than any other municipal or private plant from which this city has ever received a report. The cost per hour last month was $.0224." As I have no detailed reports from the Chicago plant, I

give below the computations above made for Detroit and Allegheny, together with prices charged by private companies in representative cities :

TABLE XIV.

COMPARISON OF COSTS TO THE CITY FOR STREET LIGHTING.

	No. Lamps 2,000 c. p.	No. Hours per Year.	Cost to City.	Cost per Lamp Hour.	Candle Power for One Cent.
Municipal Plants.					
Allegheny	1235	4077	$ 78.53	$ .0188	1093
Detroit	1716	3791	100.16	.0264	757
" Official	1564	3791	89.42	.0236	847
Private Plants.					
Pittsburg	1700	3650	96.00	.0263	760
Buffalo	2100	3650	126.00	.0345	580
Columbus, O	990	2179	74.50	....	585
Indianapolis, Ind	1100	2179	85.00	....	511
Philadelphia	6500	4000	$109 to $146	...	498 to 734
New York	...	4000	146.00	.0365	548

The municipal plant in Allegheny reports that the operating expenses for 1,037 arc lamps in 1896–7 were $53.55 per lamp, having been $61.24 in 1895–6. There were also 3,400 incandescents, and on the basis of the total output in kw. hours, these made a total equivalent of 1235–2000 candle-power arcs. The operating expenses were $73,851.98. There was no debt, and depreciation, lost taxes and insurance on the total value of the plant ($348,-921.39) at five per cent. were $17,024.72, making the total cost per full arc equivalent $73.53.

OPERATING EXPENSES OF MUNICIPAL AND ELECTRIC PLANTS.

Below, I have compared the operating expenses of the two largest American municipal stations which have published the records of their output in kilowatt hours, with the four cities, Glasgow, Manchester, Dublin and Aberdeen, and have also inserted Foster's estimate for the fourteen American municipal stations noted above in Table V, and his citation of Crompton's English stations. The high labor cost of the American stations is noticeable, but notwithstanding labor in Allegheny and Detroit is 145 per cent. and 152 per cent. higher than in Manchester and Glasgow respectively, and the cost of fuel is but slightly different, yet the total cost for the American cities is but ten per cent. higher than that of the two model British municipalities, and but little above Crompton's ideal English station. The smaller American municipalities, although bearing nearly double the labor

cost, have a total cost less than five per cent. above the twenty-three English stations.

Table XV.

Comparison of Operating Expenses per kw.

	Year ending.	Total kw. generated at the station.	Labor.	Fuel.	Supplies.	Repairs.	Office.	Miscl.	Total.
Allegheny.. .	Mar. 1,' 97	2,711,631	.0108	.0060	.0064	.0026	.0014		.0272
Detroit.....	June 30, '97	2,980,412	.0222	.0055	.0043	.0017	.0033		.0370
14 Am. Municipal Stations									
Foster...			.0251	.0173	Supplies and Office.			.0161	.0585
Glasgow.	Mar. 3, '96	1,279,687	.0088	.0083	.0018	.0088	.0069	.0009	.0355
Manchester...	Mar. 3, '97	3,028,357	.0044	.0066	.0015	.0055	.0049	.0013	.0242
Dublin.....	Dec. 31, '96	718,074	.0172	.0213	.0032	.0060	.0049	.0004	.0550
Aberdeen.....	Dec. 31, '96	236,649	.0097	.0046	.0017	.0137	.0093	.0022	.0411
23 English Stations									
Crompton....			.0144	.0232	Supplies and Office.			.0194	.0560
Ideal English Stations									
Crompton....			.0040	.0054	" " "			.0170	.0264

IMPORTANCE OF COMMERCIAL LIGHTING.

The foregoing comparisons have dealt mainly with American street plants. But it is an unfair comparison which looks mainly at street lighting. Even more important is the relief of the private consumers from exorbitant charges. Incandescent lighting can be furnished at ten cents per kw. hour or one-half cent per lamp hour—one half the usual private rates—and yield a large profit to the municipal plant. At this rate it is cheaper than gas and more wholesome and convenient. Besides, electrical power can be furnished at much lower rates. The only failures of municipal plants hitherto reported are those which furnished street lighting alone, and the so-called greater success of the private companies which took the place of the municipal failures has been based on their commercial business. One or two examples will show the great importance of this side of municipal lighting.

Jamestown, N. Y., operates 275 street lamps of 1,200 candle power each an average of six hours per night or 2,200 per year, and 1,200 sixteen candle power incandescents in alleys and public buildings. The latter at three hours per night are equivalent to 100 arcs making a total of 375—1,200 candle power arcs. The

operating expenses and insurance are $19,122.16; interest on bonds ($72,000, at four per cent.), $2,880; lost taxes and depreciation on cost of plant ($74,000, at four per cent.), $2,960.00; total cost $24,707.16. The commercial income from 1,500 lamps is $5,913.89, leaving a net cost to taxpayers for public lamps of $19,028.27 or $50.79 per year, or $.0231 per lamp hour. The only other cities of New York reported in Johnson's *Electrical Directory* as having 1,200 candle power street lamps are the following: Elmira—335 lamps at $102.20 per year, all night, every night, $.0281 per lamp hour. Middletown—32 lamps, at $108, all night, every night, $.0293 per lamp hour. New Brighton—100 lamps, at $100, all night, every night, $.0274 per lamp hour. Not considering that the cost per lamp hour should be much less where lamps are burned ten hours instead of six, the cost to Jamestown is one-half cent per hour less than in the other cities or eleven dollars per year per lamp, a saving of $4,125.00. The commercial customers of the city pay $6,000 per year which is a saving of $3,000 for them as compared with their former payments to the private company. Further, the private company still furnishes 10,000 incandescents, 188 arcs and 200 horse power, on which the reductions in charges have been fully $10,000 and probably $20,000. The total saving to the city therefore has been probably $25,000 yearly.

Lansing, Michigan pays its municipal plant $10,000 yearly for 117-2,000 candle power lamps, moonlight schedule, all night, and the plant receives also $15,000 for private lighting, making a profit for the plant of $7,000 yearly above operating expenses and interest. The rates are twelve cents per kw., being a reduction of eight cents below the rates charged by the private company whose plant the city purchased. The saving to the citizens on commercial lighting is therefore approximately $10,000 per year.

PRIVATE OWNERSHIP PRODUCES CORRUPTION.

The foregoing statistical comparisons may be taken as indicative that the great majority of the 200 or 300 cities and villages now furnishing light are actually getting better service at less cost than those which depend upon private companies. It is objected that such cannot be the case, especially in our large cities, because of the flagrant municipal corruption and inefficiency. Business ability and integrity are excluded from municipal office, appointments are made as a reward of political service, and the municipal plant soon becomes burdened with barnacles who draw pay without work. I do not deny that such is often the case. But I maintain that nine-tenths of the existing municipal corruption and inefficiency results from the policy of leaving municipal functions to private parties; and that an essen-

tial part of the present unparalleled awakening of civic conscience on the part of all classes of the people is the desire for municipal ownership of franchises. As the people become aroused to the degradation of their politics and the need of reform, their attention is concentrated on the chief source of that degradation, the under-handed and often high-handed domination of city officials and machine politics by the corporations whose life is maintained by city franchises. It is from them that the politicians get their campaign funds. Contrast the results of mnnicipal ownership above given with the following:

In a city of 100,000 population a private company is organized in the early days of electric lighting with a capital of $100,000 supposed to have been actually paid up. In 1889 the company is "reorganized," increasing its capital by $130,000, $50,000 of which is for a "license" to use incandescent lights which it had already been using for several years, selling the entire increase in capital at from ninety to par. It has a contract for municipal lighting at $144 per arc per year, but has no definite franchise for private lighting. In 1890 a new company of eminent and respectable citizens is organized, at the head of which is the "boss" of one of the political party organizations. This gentleman has associated with him nine prominent citizens who control the avenues of public opinion, all the newspapers, directly or indirectly, and both political parties. They come before the Common Council promising cheaper light. They get a franchise from the aldermen by well-known methods. They invest only enough money to erect two or three poles and so hold their franchise. They then make overtures to the old company which again is "reorganized." This time the capitalization is increased to $1,640,000 in stock and bonds, of which $400,000 in stock is given to these ten respectable citizens who procured the franchise, and $750,000 of which is in bonds at six per cent. interest, making a fixed charge of $45,000 in interest yearly on a plant that could be duplicated for less than $1,000,000. Here is a case where ten of the most respectable business men and lawyers of the city have placed their pecuniary interest in direct antagonism to good and honest government. They have become the powerful opponents of all public spirited officials who attempt to get fair terms for the city in this particular business of controlling the supply of electric light and power, and no matter how they may afterwards "reform" and demand honest government, the people at large have learned to discount what they say and to distrust their efforts in subsequent movements for civic reform. Strangely enough, two or three of these very same men, being appointed without salary to positions on the Board of Water Commissioners to construct and operate a water works plant owned by the city, exhibited the very highest integ-

rity and patient industry in promoting the city's interests and constructing a plant of which the citizens are justly proud.

We may call upon our eminent business men to arouse from their lethargy and to take an active part in municipal reform, but so many of them have been mixed in these "jobs" that the people at large have no confidence in their leadership nor in any candidate for office whom they are known to advocate. Such business men need reforming themselves, but this is to be done, not by appealing to them after the method of the revivalist, but by removing temptation from their way and giving them an opportunity to really serve the community in a public and honorable way through the employment of their distinguished business abilities. Private ownership of municipal monopolies forces them and all whom they can influence to oppose the good of the city. Municipal ownership makes it to their interest to place their abilities at the service of the city and to take an honest pride in the good they can contribute to it.

I do not for a moment deceive myself by thinking that this movement for municipal ownership is child's play, or that the companies now in possession will relinquish their hold without resorting to the most determined and unscrupulous devices. There are many indications that they are organizing throughout the country for an attack both upon municipal ownership and upon the integrity of municipal officials. I have the following from a gentleman of the highest authority in the city of Hamilton, O. He says:

"The situation here promises to be very interesting in the near future. The old gas company, which carried things with high hand for many years, received an almost fatal blow about nine years ago when it attempted to get a new contract for fifteen years at two dollars per thousand feet; it used every means to secure this, and refused to enter contract for shorter term or lower rate. The city built its own gas works, but was fought by the old company at every point, until the matter was finally disposed of by the United States Supreme Court. The company here was assisted in the fight by other companies interested in their cause, but when the fight ended the local company was not in good financial condition. Although it had claimed that gas could not be made with profit at less than two dollars it promptly met the city price of one dollar, and later followed in a reduction to eighty cents, the present rate. The number of its customers has steadily decreased in spite of all its efforts—not always commendable—to retain them. Within the last two months the gas company has taken on new vigor; work is now in progress by which it will double or even triple its capacity for producing and storing gas, and marked improvements are being made in its electrical plant which was until recently a very small one. The company is taking contracts for electric power, etc., at rates lower than can be found elsewhere. The company's President announces that they intend to 'do up' the city as to both gas and electricity. I am informed, and the authority seems almost unquestionable, that the money for the im-

provements and impending campaign of the old gas company is furnished by a number of concerns interested in the downfall of municipal ownership of such plants. Several things have been done that seems to point to a conspiracy of this kind."

Not only has the Hamilton Gas Company begun to compete with the city at figures below profit, (the city furnishes electric light and power at eight cents per kw., one-half to one-third of the price usually charged by companies), it has also through political influence and control of the aldermen prevented appropriations for operating expenses and new construction.

These concerted and unscrupulous attacks upon municipal integrity need not be looked upon as discouraging. More than anything else they will arouse the common people from their lethargy, and will disabuse them of their fond reliance on mere respectability as a guaranty of public spirit, will direct their attention to the true source of municipal corruption, and will discipline them in organized resistance and in aggressive movements upon the citadel of the corruption funds. In the end this discipline and organization will be the guaranty of efficient administration when once ownership is obtained. It is only in those cities like Detroit which have had a hard training for several years in open battle with the franchise holders, that we may look for that alert public spirit and jealous determination which will make municipal ownership a lasting success.

ADMINISTRATIVE REFORMS RECOMMENDED.

It is this struggle with monopolists, too, which will force the people to the adoption of administrative machinery better adapted to municipal operation of industry than any that we now have. It must be confessed that the legal organization of our municipalities is not yet perfected for the espousal of public ownership on any large scale. The experience of English and many American cities indicates the following administrative reforms as necessary to accompany or precede municipal ownership.

1. State Supervision for Cities, similar to that of the Local Government Board of England or that of the Board of Gas and Electric Light Commissioners of Massachusetts or of the Public Examiners of Minnesota and Dakota. A state Municipal Board like that proposed in New York by the Commission on Cities of the Third Class, would prescribe that most important requisite, uniform methods of municipal bookkeeping, would audit accounts of cities, and would direct the proper entries for new con-

struction, depreciation, etc. Such a board would sanction loans and set the terms of years for repayment and the provisions of a sinking fund. In this way the constitutional limitation on municipal indebtedness could be replaced by a more elastic limit, on the principle that the acquisition of a productive property is really a lessening of the city's net debt instead of an increase. The board would publish annual reports giving details concerning finances, costs of production, revenues, etc., of the various cities, thus furnishing the basis for intelligent improvement in administration and for further acquisition of municipal plants.[1]

2. The substitution of unsalaried Municipal Boards or Commissions instead of the Board of Aldermen as the administrative head. These boards should be composed of five or six members elected by the people or appointed by the mayor, one member to be chosen each year for a term of five or six years, thus giving continuity of service. The legislative branch of our cities has so hopelessly decayed that, until something like proportional representation is adopted, no additional powers should be granted to it. The successful electrical plants throughout the country in larger cities are under control of commissions. Wherever the spoils system and corruption exist we may expect to find the aldermen in control.

3. The Referendum and Initiative. The referendum is already universal upon all questions of purchase or installation of a municipal plant. It should also be required along with the initiative upon questions of the sale or lease of a plant, and the appropriations for improvements. Had it been in force in Philadelphia it is needless to say the recent scandalous lease could not have been consummated. Councils of that city refused to submit the question to the people although earnestly petitioned to do so by the Municipal League. The obligatory referendum is also necessary as the only thorough means for banishing bribery and the corrupt use of money from municipal politics.

4. A civil service reform system in which the superintendent or electrical engineer at the head of the plant should be appointed

[1] See article "State Supervision for Cities," by J. R. Commons, in *Annals of American Academy of Political and Social Science* March, 1895. Also Goodnow, *Municipal Home Rule*, N. Y., 1895, and *Municipal Problems*, N. Y., 1897, and Maltbie, *English Local Government of To-day*, N. Y., 1897, Columbia University Publications. [In this connection attention should be called to the article by Professor Goodnow in this number, *The Relations of the City and the State*.—Editor.]

on merit and held personally responsible, and then should be entirely free to appoint and remove all subordinates without interference from an outside civil service commission. This is the practice generally where a board of commissioners, instead of the aldermen or mayor, has charge of the plant.

APPENDIX.

The prices per year for arc lamps given in the last two columns of Table II may be compared with the following table showing the highest and lowest and average prices per year paid to private companies. The figures are taken from a bulletin issued by the General Electric Co. of Schenectady, N. Y., and are in effect during 1896–97.

TABLE SHOWING BY STATES HIGHEST, LOWEST AND AVERAGE PRICES PER YEAR PAID BY CITIES TO PRIVATE COMPANIES.

State.	City.	C. P.	No. hours.	Per year.	Per lamp hr.	State.	City.	C. P.	No. hours.	Per year.	Per lamp hr.
Cal....	San Francisco.. .	2000	4000	$201 00	.05	Mass...	Fall River.....	2000	4000	$156 12	.039
	San Bernardino ...	2000	4000	78 00	.02		Northampton.....	1200	2179	67 50	.031
	Av.....	....	2885	$119 68	.045		Av.....	....	2705	$93 81	.037
Conn .	Meriden...	2000	3460	$110 00	.032	Mich...	Negaunee	2000	4000	$108 00	.027
	Stafford Springs...	1200	1460	62 50	.043		Battle Creek.....	2000	1825	57 00	.031
	Av.....	....	2730	$86 02	.035		Av..... ...	....	3465	$77 04	.034
Ill	Joliet.....	2000	4000	$95 00	.024	Minn ..	Minneapolis.....	2000	4000	$140 00	.035
	Lincoln.....	2000	4000	70 00	.018		Spring Valley.....	1200	1640	72 00	.044
	Av.	...	2789	$77 02	.031		Av.....	....	2179	$102 00	.047
Ind.....	Ft. Wayne.....	2000	2850	$120 00	.053	Mo.....	Jefferson.	2000	4000	$123 00	.031
	Auburn.....	1200	1825	60 00	.033		Sedalia.....	2000	4000	63 50	.016
	Av.....	. ..	2682	$79 33	.033		Av.....	....	2917	$83 00	.032
Iowa...	Des Moines.....	2000	4000	$126 00	.032	Neb....	Grand Island.....	2000	4000	$144 00	.036
	Ottumwa.....	2000	4000	80 00	.02		Plattsmouth	1200	2179	96 00	.044
	Av.....	....	2870	$85 73	.032		Av.....	....	2991	$109 50	.041
Kas....	Hutchinson.....	2000	4000	$144 00	.036	N. J....	Camden.....	2000	3885	$138 00	.036
	McPherson..... ...	2000	1220	60 00	.049		Bridgeton.....	1200	2852	81 00	.028
	Av.....	....	2784	$97 19	040		Av.....	....	3615	$105 36	.032
Ky.....	Mt. Sterling.....	1200	2179	$100 00	.046	N. Y ..	N. Y. City.....	1200	4000	$182 50	.045
	Cattellsburg.....	2000	4000	66 44	.016		Phœnix.....	1200	4000	45 00	.011
	Av.....	....	3063	$88 07	.032		Av.	....	3887	$98 61	.026
Me.....	Rumford Falls....	1200	4000	$90 00	.022	Ohio...	Dayton.....	2000	4000	$100 00	.025
	Auburn.....	2000	2179	50 00	.023		Nelsonville.	1200	4000	60 00	.015
	Av.....	....	2689	$67 50	.031						
Pa.....	Germantown.....	2000	4000	$135 00	.034	Vt.. ...	Brattleboro.....	2000	4000	$150 00	.038
	Franklin....	1200	3650	55 55	.016		Middlebury.....	2000	1650	52 00	.032
	Av.....	. ..	3981	$85 75	.022		Av.	....	2254	$84 67	.039
Tex....	San Antonio.....	2000	2179	$127 75	.059	Wis....	Superior.....	2000	4000	$146 00	.037
	Paris.....	2000	4000	96 00	.024		Racine.....	1200	1550	58 00	.037
	Av.....	....	3472	$108 75	.037		Av..... .	....	3057	$81 16	.030
	Total average for		46	States..	.....	.....	.....	....	3396	$101 18	.034

MUNICIPAL ART.

By Frederick S. Lamb.

It seems strange that the American mind, usually so quick to appreciate the pecuniary value of any movement, has not seen the civic advantage of Municipal Art. There is a competition of cities just as there is a competition of individuals, and this competition has remained unrealized by the citizens of Greater New York. In fact, until recently, everything has been done, or left undone, to make our city as unattractive as possible. Improvements when introduced have been costly and misdirected. Millions have been lavishly expended at a late date to accomplish what could easily have been obtained at a small expenditure had the question been taken in time; millions expended, which, if expended under competent direction, would have accomplished double their present results.

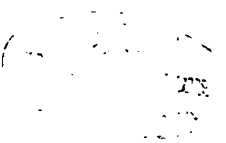
Parks, which in the natural growth of the city should have been reserved, are now acquired at an enormous expenditure, and no sooner is a small section secured for the citizens than it becomes the mark of hostile legislation, and every interested corporation seeks to appropriate it for its own use.

Every new invention, every new innovation presages some new monstrosity. Every company, traction or otherwise, every inventor seems at liberty to assume a portion of the light and air left the poor public for their own benefit. Streets are rendered almost lightless, buildings tower to the skies, and the poor foot-passenger is left sunless and cheerless to wonder why the whole of Manhattan should have too much building on the one hand and too little on the other.

The so-called utilitarian spirit, the so-called progress, the so-called practical citizen have much to answer for. One of the most beautiful locations ever granted a people for a home has been ruthlessly ravaged. Every natural advantage, every natural beauty has been ignored; every opportunity sacrificed to the steady onward march of serried streets; natural drainage, natural levels, so disregarded that not only portions of the city proper,

HIGH BRIDGE, HARLEM, BEFORE RECENT CHANGES WERE MADE.

BRIDGES OF THE SEINE AS SEEN FROM THE GRAND HÔTEL DU LOUVRE.



but surrounding sections, have become menaces to health. Old landmarks are obliterated; historical monuments destroyed; buildings of national importance sold for second-hand building material; rivers, fields and commons of the old villages swept away, and in their place the factory or rear tenement appears. The most impressive river front ever granted a city is bereft of all natural beauty. The depredation extends to the opposite shores, and the historic section of Pleasant Valley is a fitting place for oil refineries and stock yards.

Remember Manhattan of the past, and look at it now! Where are the gifts so lavishly bestowed by nature. Central Park, a monument to the genius of its designers, Vaux and Olmstead, and Riverside Drive alone remain. City Hall Park, one of the few of the early reservations, has been encroached upon because the city officials were too parsimonious to pay a moderate sum for a suitable site for the New York Post Office. City economy has been matched by corporate greed, and the beautiful St. John's Park, absorbed by the New York Central, has been forever lost to Greater New York, thus eliminating another of the few remaining breathing places.

The belief that in some unknown way New York was exempt from all rules governing other cities must have indeed been held by those in charge of the city. Not only all æsthetic questions, but even the most common laws of sanitation and everyday living have been ignored, until New York with its filthy streets, rear tenements and corrupt government, has become the laughing-stock of foreign countries and a shining example of the failure of free institutions.

Reviewing the records of the past fifty years, it would be difficult to imagine a more disastrous management of city affairs—a management producing or permitting conditions, to correct which will take untold energy and untold wealth. Why we should have been willing to sacrifice natural advantages and recklessly, wastefully disregard the material at hand, remains and always will remain a mystery.

Nor is this waste and misapplied extravagance confined to the past. Every day we have new evidence that the same reckless spirit is at work In the Riverside Extension, recently adopted, we learn that the city has accepted a scheme which involves an expenditure variously estimated at from three to seven millions

of dollars, and yet those who have carefully looked into the question tell us that had the proposed driveway been made sixty feet wide, and "the natural grades followed more closely. the Extension could have been built for one million five hundred thousand dollars, and would have been better adapted to the present street plan." The scheme adopted has been characterized as "an outrage" by the comptroller, and a leading paper in speaking of the Viaduct states that "certainly no competent person can have been asked to consider what will be the effect of the proposed construction upon one of the most commanding and attractive points of view upon Manhattan Island, for any competent person would have answered that it would be so injurious as to be almost ruinous." The Harlem with its many advantages might easily have rivalled the Seine. The natural formation of the land lends itself to the picturesque construction for which the foreign river is so justly famous. The future growth of the city will necessitate the construction of many bridges in addition to those already in place, and had the officials in charge in past years been wise enough to have reserved this section, a picturesque river frontage second to none in the world could have been secured. Tardiness in action has defeated this purpose. Corporate interests have already secured river rights, and Harlem is rapidly becoming a commercial centre with all its attendant drawbacks.

A spasmodic effort has been made in the Speedway to redeem the short-sightedness of former generations. An enormous sum of money, some five millions of dollars, has been set aside. The project hastily conceived has been rushed through without the aid of expert advice, and so far as completed looks more like a railway cut than a driveway in the suburbs of a great city. As usual, natural formation, natural beauties have been ignored, and what might have been one of the most interesting features of our city is now commonp'ace in the extreme.

And during all these years what has the artist said or done? How has he met his responsibilities to the Municipality?

In the early days there were but few giving their time and attention to æsthetic work, and they of necessity worked as individuals. Later the Apollo Association, afterwards the American Art Union, came into existence. Its object was, by subscription of five dollars from each member, to secure a sufficient sum to purchase a reputable work of art, and then to reproduce this in

PATHWAY ON THE SHORE OF LAKE COMO—ITALY.

popular form, giving each member a copy. The original after being reproduced became the property of one of the members, ownership being decided by lot. Its praiseworthy aim to increase public interest in native art was pushed with vigor. Many working by day in banks, stores and other departments of public life gave their evenings to this meritorious effort, and many reproductions as well as original works of native artists were thus scattered among the masses. Unfortunately the element of chance introduced in deciding the ownership of the original paintings, brought the movement within the jurisdiction of the law framed for the suppression of lotteries, and the Art Union was forced to disband.

To the National Academy of Design belongs the honor of being the first art society which still preserves its organization. This most admirable society, the parent of all others, has from the start given its attention to the fine arts, and has practically restricted its effort to paintings in oil, with an occasional interest in sculpture. This restriction of necessity caused the formation of the Water Color Society. Societies of etchers, engravers, &c., each having for its purpose the advancement of its particular specialty, and numberless clubs appeared, partially artistic, partially social in their nature ; many had but a fleeting existence. The inevitable differences of opinion regarding theories of painting brought about the formation of the Society of American Artists, and later the Water Color Club.

But through all these years the efforts exerted were in a specific and technical direction. Good schools were formed, but the field was restricted. Each little group interested itself in its own specialty ; often so intensely as to be antagonistic to its sister societies.

As yet municipal art slumbered. One of the first signs of the movement manifested itself in the formation of the Art Students' League. This social union was formed on a co-operative, self-supporting basis. A certain technical knowledge was a requisite of membership. The board of control was elective and chosen from those actively at work in the school. Its success was instantaneous.

The Architectural League carried this idea still further by drawing together in one group architects, painters and sculptors, and in enunciating the interdependence of the "allied arts." A

necessity being felt for proper assembly rooms, galleries and school rooms, the Fine Arts Society, composed of the Society of American Artists, the Architectural League, Art Students' League, and many generous patrons of art, was formed. The Fine Arts Building, in Fifty-seventh street, was built, and a suitable centre for art effort thereby provided.

Thus, unconsciously to themselves, the artists were obeying the influences of the day, were combining, organizing and endeavoring by concerted action to strengthen the cause of their profession. But still the municipality found little or no place in their efforts or discussions.

The constant contact of the student with European schools and influences could not continue without results. Coming directly from the great foreign centres, he could not but feel the shortcomings of his native city. As an earnest endeavor to awaken the slumbering pride of the city, the Municipal Art Society was created. The revenue derived from dues of members was to be used in providing from time to time, as circumstances permitted, one or more public decorations. The wall decoration in the Criminal Court Building is the first result of its efforts. The idea, which seemed so excellent, does not appear to have received the sympathy or approval of our citizens. Whether this is due to the fact that the movement started with the artists and not with the laymen has not as yet been determined, but it remains unfortunately true that there is little or no public interest in the effort.

In the groping of the artistic mind for better things, the National Sculpture Society and the National Society of Mural Painters were formed, each with the avowed purpose of furthering the development of art, not only in this city, but in kindred cities throughout the United States.

So many different societies meeting at varied times made united action difficult and tedious. Individual action without conference on important questions seemed unwise. A central committee, composed of representatives from each society, was proposed and the Fine Arts Federation recently formed.

But in studying the development of these societies, leagues and federations, we find little if any of the true communal spirit which made the cities of the middle ages the art centres of Europe. We find the desire to "make any sacrifice for art,"

FONTAINE DES INNOCENTS—PARIS.

"art for art's sake," on every hand. Yet for years these very enthusiasts have tolerated commonplace architecture, obstructed streets, telegraph poles, elevated roads, bill boards, every advertising monstrosity conceived by the human mind, and have, from morning until night, wandered among the worst aggregate of public fixtures ever produced by any city in the world, and have wandered speechless. The evening may possibly have been devoted to "art for art's sake," profound discussion of the impressionistic theory, or the necessity of a closer "study of nature." Absolute truthfulness to life may have absorbed the time and attention of the members, but certainly no organized effort was made by any society until a recent date to ameliorate the condition of the city. And what efforts have been put forward have been more in the form of criticism than formative action. We hear of protests from societies, objections from leagues and federations, but what creative, aggressive action is being taken by any art organization? How are our individual artists meeting their personal responsibilities to civic art? Is it by allowing the absorption by city and corporate interests of all natural breathing places? Is it by permitting the destruction of all the beautiful old Dutch and Colonial mansions? Is it by allowing the obliteration of historic memories? Is it by giving up without protest, franchise after franchise, grant after grant, until corporate interests become most powerful and a menace to all advance, to all improvement? Is it by permitting the architecture of every avenue to be but the constructional frame for the support for a series of nondescript signs? Is it by permitting each thoroughfare to be filled with telegraph poles, electric lights, lamp posts, execrable in design, elevated roads and other obstructions? Is it in this way he meets his responsibility?

We are told that in London "there is a social movement in art, a strong social movement in politics, and a social movement in the church, having much of the impulse of original Christianity." So, indeed, there must be here a social movement in art before a municipal art can be hoped for—a social movement, deep, strong and tireless. "A pot cannot be made to boil from the top." No civic art can be hoped for, if the veriest necessities of everyday life are poor in design and vicious in color. New

York can never hope to produce artists who shall rival those of the past, if she neglects to surround them with inspirations to work; if she does not possess that city pride which, in former ages, made each worker strive to make *his* work worthy of *his* city.

While foreigners have been only too anxious to study American institutions, Americans, on the contrary, have treated foreign precedent with contempt. Yet in civic improvements, all cities are in advance of our own. Pavements now recognized as the best, have for years been in constant use abroad. In the planning of new parks, the arrangement of avenues and boulevards, the widening of old streets, many useful lessons might have been learned, and the lower part of our city saved its present embarrassment. The introduction of boulevards in old Paris and the widening of streets in congested London, have been shown to be of financial as well as æsthetic value. Shaftesbury Avenue improvement is a notable example worthy of imitation here. The government control of advertising placards in Paris, the setting aside of certain prescribed spaces, and their general arrangement so as to make the streets attractive, are but a few of the many minor points worthy of emulation.

The possibility of river fronts in great cities is aptly shown in the treatment of the London Embankment; the utilitarian as well as picturesque possibilities of wharfs in great cities, in the grand series of quays in Antwerp; the use of water as a means of communication, in the cities of Holland.

Ten years ago it was suggested to use street placards as an art education medium. The idea was scoffed at, and yet two years later, the Société Populaire des Beaux-Arts was formed in Paris, and has since by its untiring efforts, done much to aid the advancement of public art. And now comes the information that modern Belgium bids fair to rival ancient Flanders as the public art centre of Europe. The National Belgian Society for the development of art in its application to street decorations and to all objects of public usefulness, was founded in Brussels in 1894 by a number of patriotic artists for the purpose of restoring to art its social mission of past ages, and of transforming streets from their present ugliness into artistic thoroughfares. It aims also to apply art to modern inventions and appliances. The society has en-

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ROADWAY ON THE SHORE OF LAKE MAJOR.

deavored by means of competition and adequate prizes to enlist the best ability in solving the various problems attacked. The society has received the support of the Town Councils of Brussels, Antwerp, Ghent, Bruges and others. Subsidies have been granted to be awarded in money prizes to the most meritorious designs. As a result, Brussels possesses not only artistic buildings but artistic shop signs in wrought iron, porcelain and carved wood. The electric light poles, so hideous in most cities, are graceful creations of the ironmonger's art. Posters and placards are an addition rather than a detraction. Public fountains, street names, electric car waiting rooms, newspaper stalls, telephone boxes, in fact all utilitarian necessities, have felt the artistic influence of this admirable society. Mural paintings and mosaics of merit adorn facades of business buildings, and under the inspiration of this movement, Brussels of to day bids fair to rival the art centres of the past. Best of all comes the news which ought to appeal to every American that "it is profitable;" that by increasing the beauty of their city, they have increased its advantages and attractiveness, and that modern art thus applied "enhances the prestige of a nation, and by encouraging the best instincts of the people, raises their whole moral tone."

Precedent upon precedent might be quoted. But why study precedent when it is impossible to follow? Why cite Paris as a city which has limited the height of tall buildings and hold it up as an example for the American who revels in sky-scrapers? Why discuss the artistic sky line of our great city, when bill after bill has been defeated at Albany, because of the selfish interests of certain corporations? Why point to the boulevards of Europe when it is known that every street extension, every projected roadway must be connected with and subservient to a real estate deal.

The use of private capital and the responsibility of the individual has been urged as the solution of the problem. Many philanthropic men abroad have interested themselves in this good work, and here in New York, the "Mills House" No. 1 is an excellent example of what intelligent interest can do. A model tenement, artistic in its architecture, utilitarian in construction, and self-supporting, has been erected in a congested district. Three days after opening, twelve hundred of the fifteen hundred

rooms were taken, proving the existence of a demand of such buildings. Here for almost the first time, the highest ability has been invited to solve the simplest utilitarian problem and the result has been an unqualified success.

While individual effort in many cases, may be and undoubtedly often is successful, yet if this effort be not applied under organized direction, it is still doubtful, if the result will be all that is desired. It is the most stinging criticism of free institutions that municipal action should fail, and individual enterprise perforce be appealed to. If the work of the individual is beyond the appreciation of his times, unless he can educate his contemporaries to agree with him, his good work must inevitably cease with his personal effort.

The exhibition has been suggested as the means of artistic social improvement. Exhibitions have been tried and tried successfully. We learn that seventy thousand poor attended one exhibition on the East Side in London, and that similar exhibitions in this city have met with encouraging results. The Kyrle Society is undoubtedly doing a good work. But compare for one moment the transitory effect of an exhibition of works of art visited perhaps once or twice during the season with the daily influence of surroundings forced upon the attention by the routine of everyday life. The work of art in its secluded gallery must inevitably seem apart and separated from the life of the laborer, and cannot possibly affect him as the public necessities which from constant association become an indispensable part of his existence.

Art must be indigenous to be of value. Art must appeal to the great masses of the public to regain its educational influence. Foreign examples may be studied, and foreign pictures reproduced, but unless art tells the lesson of the human heart, unless the cry of human suffering is echoed there, unless the daily struggle of the individual is felt and recorded, unless all the aspirations, hope and prophecy for the future are expressed, art must of necessity have fallen far, far short of the mark and failed to accomplish its mission. It is this that has been realized by Belgium, which, having a gross population hardly greater than our city, yet has attempted more than our entire nation. It is this which has led to the formation of a society for the development of art, and it is this which has enabled it, in spite of all opposi-

tion and pessimistic prediction, to accomplish more in three years, than the rest of Europe in double or triple that time. It is this belief in the masses, in their life, hope and aspirations which has spurred the artists of Belgium and thrown a halo of inspiration around the simplest problem. It is the appreciation of this divine truth, which has made this movement the most earnestly studied, the most readily followed.

We hear on every hand of the "social movement," "social reform," "religious awakening" and "municipal art reform," different names for the same thing; all so closely allied as to be inseparable. No social movement can advance one step without unconsciously enlisting the sister arts. Art and religion go hand in hand.

Picture writing from the earliest days has been man's universal language. Symbols, signs, heraldry are but the shorthand of the mind, and but for the decadence of our art, would to-day supplant many needless mediums. Art has been debased and has become aristocratic in its very inception. William Morris, socialist in theory, publishes his work in limited editions at extravagant rates. Walter Crane, socialist, is willing to have his original plates destroyed to thereby increase the value of the limited number of copies printed. Is it to be wondered that the people look upon art with distrust, as but another of the many class distinctions? Should one be surprised to learn that pictures, catering as they do to the luxurious tastes of the wealthy, whether loaned in exhibitions or given in charity, of necessity fail in their purpose?

Let us go back to first principles and again attack the problems of every day life with the experience of past ages to help us. Let us not be led astray by the individualism of the present age. Let us not be deceived by the glamour of easel work, but let us realize that art to be of value must answer the question of utility and not relegate itself to the exclusiveness of aristocratic appreciation. In so far as art fails in this respect, just so far it loses its claim to the title of Municipal Art, and just so far it alienates the sympathy of the great majority of our citizens. Let the architects devise schemes for historic and monumental buildings. Let our engineers endeavor to solve the problems of technical construction, and solve them in such a way

as to obtain the necessary result without violating every aesthetic principle. Let our sculptors so work, that when their statues and allegorical groups are complete, their city is benefited. Let the mural painter in his every effort so work that the simplest object in his hands becomes a thing of beauty. Let him refuse no opportunity, no task however simple, and let his every effort, whether remunerative or unremunerative be for the beautification of his city and its homes, and let all "allied arts" and kindred professions unite in their efforts to raise *their* home—The Greater City of New York—from the common place level of a simple manufacturing centre.

Never was such a field offered any group of earnest workers. Never were such natural advantages presented on every hand. Never was a time so propitious to success. The formation of a Greater City has appealed to the imagination of the legislator and the politician. On every hand we hear the distant rumbling of future success. Great efforts will be planned, great enterprises undertaken, great modifications devised. Their result, their ultimate æsthetic success depends upon those who guide their progress. How will our artists meet their responsibilities? Are they citizens as were the citizens of the past, or are they an aggregate of selfish individuals, interested only in their personal advancement? Art as a charity is not wanted. Art as an aristocratic adjunct is not needed. Art as an educator will be welcomed on all sides and no longer regarded with suspicion by the "lower half." When one member of society suffers, all suffer. When one class is affected, all are affected. No action can be taken which does not influence the whole. Nothing is too unimportant to be considered as a municipal problem. The art education of the people depends upon the permanent examples which meet the eye on every hand and gradually make upon them a lasting impression. The better impulses of the people will become hereditary, and "a long step will have been taken in the solution of the social question by the humanization of the people."

Look for one moment at the field for work. The Harlem River, mutilated as it is, is not yet beyond the hope of redemption. Prompt and vigorous action may still wrench victory from defeat. The river front with all its present complications, may through judicious legislation be vastly benefited. The crusade for small parks, so ably carried on, may be broadened into a

ARCADE ON LAKE FRONT—BELLAGIO.

demand for public recreation buildings. The present street fixtures must in time be replaced, and can then be designed under competent supervision. Franchises not yet granted may be so qualifiedly conferred as to insure artistic success. Church property, educational concessions may when bestowed be accompanied with the condition that upon removal, the property must revert to the city at a proper valuation, thus insuring as the city grows and these institutions follow its progress, the reservation of these small holdings for the use of the city. The exemption from taxation, the many concessions made might at least insure the city the option of purchase at a fair valuation, when the property no longer fulfills its original purpose. Public signs might be required to be more uniform and less obtrusive. The recent rapid development of the artistic poster is but one of the many instances of the possibilities in this direction.

Public schools might not only fill their educational province, but be so designed as to form recreation centres for the districts in which they are placed. A slightly increased expenditure could provide assembly rooms, reading rooms and galleries of no small importance. Public entertainments and musical recitals could be given from time to time, and the simple schoolhouse of the past be developed into the model educational building of the future.

Markets, so essential to the life and economical existence of the community, could, instead of being as at present a drawback to the section in which they are placed, be so designed as to contain not only food products, but shrubs and flowers, and the stalls for these could be so placed as to appeal to the most fastidious critic. The union would be to the advantage of both, and as in all true reforms, the public would also be benefitted.

The baths of Caracalla have become historic as architectural examples. Why should not New York follow? Public baths, though so often mentioned, still remain an unaccomplished fact. On every hand their necessity is realized, and as yet the problem remains unsolved. Let us hope that when the solution is reached, the necessity of baths for winter use, as well as the fleeting summer substitutes will be recognized.

And why should the city restrict its efforts to its own limits? Why should its artists confine their study to local questions,

when the surrounding country may at any moment be annexed? In advance of the rapid growth of our city, much can be accomplished at comparatively small cost under competent guidance. Many preliminary steps may be taken, and taken in the right direction, although the final completion of the work may for years be deferred. Forethought is far more valuable than afterthought. One million of dollars judiciously expended now may save millions at a later date. Then why these absurd restrictions to city limits, why these imaginary state lines? Why should not the common sense of the community overstep these artificial barriers and treat the suburbs with as much care as the city itself?

We are told that eventually the Newark Meadows are to be reclaimed, drains placed, canals dug, dykes raised, and from the present barren marsh, a second great city will spring. Is this project to be left unstudied because an artificial state line intervenes? Is this work, one of the greatest of the day, to be left to mediocre ability? Is this question like all others to be unappreciated until from sheer force of necessity, something is done and done ill-advisably? Could any engineer, could any architect, could any artist dream of a problem more fraught with possibilities? The utilitarian treatment of Holland, the æsthetic dream of Venice lie at our very door.

A corporation counsel has affirmed that "there is no legal objection to the state owning property outside of its limits, but that the state would be a fool to consider such a proposition." Is it folly for the government to own lands? Is it folly for Boston to possess farms? Is it folly for the city to contemplate the possession of its franchises? Is it unwise for the street cleaning department to acquire land upon which to deposit the refuse of the city and thus in time create valuable property? Is it folly for the community to seek to ameliorate the condition of the poor by sending them to lands outside the city limits?

We are told that our city should be managed on a "business basis." What business interest would refuse to acquire adjacent property, if they deemed it to their ultimate advantage? Even the nation at critical moments has cut the Gordian knot of international dispute by direct purchase? How much simpler for the city?

CANAL—VENICE.

Our courts have decided that the city has the right to acquire parks which are in some measure outside the limits when acquired, and it has long been a well understood fact that the city must protect its water supply by securing sufficient property to guard the source and guarantee its purity. Large tracts of land have already been purchased for this purpose in Putnam and Westchester Counties, and we are now looking towards the valley in the rear and to the north-west of the Palisades as the most probable additional water supply in the near future.

At this moment, on the Jersey shore, thirteen miles of river front lie withih our grasp. Corporate interests, the inveterate opponent of municipal action, have as yet secured no foothold. This historic section, world renowned for its grand beauty, possesses the material for numerous parks and reservations. And what prevents its purchase? Surely not the cost! The entire river front of the Palisades could be acquired for the sum now expended and gladly expended for one small city park. The inherited fetish of State rights, the imaginary difficulty of a State line, the invisible restriction of city limits, paralyzes every effort. Our eyes are closed to the future. We are but dreaming of the past. The daily blasts which tear these Palisades to shreds, the daily devastatioh whicb turns the landmarks of the Revolution into gruesome quarries, the ceaseless roar of the stone crusher working night and day, is unheeded by our citizens and unappreciated by those in charge of our interests.

The Fine Arts Federation in council assembled wisely determines that "it is beyond their jurisdiction," and the city fathers sagely state "that it would be folly" for our city to interest itself in a section which has been a theme for the poet and the historian, a section which will inevitably become an integral part of our great city. New York refuses to purchase the Palisades, but it does not scruple to utilize them as crushed stone for her asphalt streets. The individual citizen feels powerless to stay the devastation, yet does not hesitate to rear twenty-story buildings, using the rock from these same Palisades as a foundation. Short-sighted economy, insular conservatism shows itself both among our officials and our citizens.

History repeats itself. The present Riverside Drive was given away by the people to a corporation, to be repurchased later at an expenditure of five millions of dollars. At some future date

the Palisades will undoubtedly be annexed at a cost of untold millions, and our landscape artists will then be called upon to reproduce from the shapeless ruins the natural beauties now so rapidly being destroyed.

A leading paper in a recent issue states: "The time is not far distant when the world will have forgotten all that we are doing now in and near Greater New York, except one event. We shall be saved from oblivion by the barbaric vandalism of our destruction of the Palisades. History will never forget us. Our remotest descendants will never forgive us. We shall share the infamous immortality of the man who burned the Temple of Diana at Ephesus. Let us put ourselves in the perspective of posterity and save ourselves from everlasting reproach."

These are but a few of the many problems confronting us. Their solution will vastly aid our Greater City. Their neglect will but increase the universal censure and contempt which has been heaped upon our previous misguided action. The finger of scorn has been justly pointed at us. The European press daily mentions our unfortunate political, as well as artistic past, as ample proof of the failure of free institutions. Popular government is found wanting, and many good earnest men think the present evils incurable.

And yet we know that down deep in the hearts of the people is a strength, a force, an energy, which when roused will sweep all before it; an energy which, when once started, will not rest until what is now most censured becomes most praised.

Who will arouse this latent force? Who will touch this latent sympathy? Who will guide the great reactionary wave which will inevitably sweep the country? Past experience has shown that unless under expert guidance, the best of effort may fall far short of the mark. In this crisis, the city must turn to its professional members, and from them expect, nay demand, the benefit of their technical training. Let no artist echo the scathing denunciation now being poured upon this city. Let no artist complain of the "lack of art atmosphere," of the lack of an "appreciative audience," of the "want of sympathy," so long as he refuses to answer the call of duty, and aid *his* city with *his* best effort and *his* ability.

This is the field; the battle is waging; the issue is before us. Shall the victory be secured?

THE PALISADES.

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THE RELATIONS OF CITY AND STATE.

BY PROFESSOR FRANK J. GOODNOW.

The problems of municipal government are of two kinds: the first concern themselves with the position which the city occupies in the general scheme of government; the second concern themselves with municipal organization. The latter class of problems have assumed much the greater prominence in the American public mind. As Dr. Albert Shaw says, "In the United States the reformers * * * * are forever overhauling, repairing and reconstructing the form of municipal government." "Their attention has been devoted to the structure and mechanism; * * * * they keep changing it perpetually." On account of this continual change in the mechanism of city government, municipal reform in the United States has become almost synonymous with municipal reorganization.

But notwithstanding the prominence that has been given to this problem of municipal organization, the problem of the position of the city in the general scheme of government is really a vastly more important one. Just as when we build a house it is of the utmost importance that we make up our minds definitely what is to be the purpose for which the house is to be erected, before we can attend with advantage to the details of its internal construction, so when we organize a city must we determine what position it is to occupy before we can frame a suitable organization for its government.

Again, a failure to comprehend exactly the position of the city in the state government makes all attempts to derive profit from the comparative study of municipal administration in foreign countries more or less futile. For the position assigned to the city in a foreign state may be quite different from that of the American city, and on that account institutions which may be proper for a foreign city may not be proper for an American city.

Finally, it may be that the success which we are accustomed to ascribe to foreign municipal government is due much more to the position which has been assigned to the foreign city by the foreign law than to any details in mere municipal organization. It

may also be true that the long and discouraging list of failures in our attempts at municipal reform in this country is largely due to the fact that the position which the city occupies here is an improper one.

What now do we mean by the position of the city? To answer this question it is necessary to consider the subject from the purely theoretical point of view. If we do so consider this subject of municipal government, we see that the city may occupy one of three positions. In the first place, the city may be the state; that is, the city may not only rule the urban community of which it is formed, as a sovereign power, but may also have jurisdiction and sovereignty over the adjoining rural territory. Such was the position of the Greek cities. Such until comparatively recent times, was practically the position of the free cities of Germany, such as Hamburg, Bremen and Lubeck. But this type of city has practically passed away. It may be said that the city-state, as such a city may be called, has ceased to exist.

In the second place, the city may form a part of a state, which is to be governed, as all other parts of the state, by the authorities of the state. This was the position practically assigned by the Napoleonic scheme of administration to the French city of the beginning of this century. Under such a scheme of administration the city is in a state which is dominated by its rural population, in distinction from the city-state, dominated by the rural communities, rather than dominating them.

In the third place, the city, while being recognized as a component part of the state to which it is subject, may be recognized as having an individuality distinct from that of the state, with needs of its own, different from the general needs of the state. Such is the position which is assigned, either as a result of law or of custom, to the modern European city.

What, now, is the proper position for the city to occupy? In the consideration of this question it will be assumed that the city is and will remain a part of the state. Perhaps no better means of determining what is the proper position of the city can be adopted than an analysis of the functions which are at the present time discharged within the limits of a city. If we adopt this method of determination, we shall see that in the first place,

functions of state government are discharged within the city. A citizen of an urban community is none the less a citizen of the state. He has the same needs as the citizen of any other portion of the state. He must be protected against violence and disease; he must have some means of determining disputes with regard to property and other social relations into which he enters; his children must be educated, and he himself must pay his share toward the support of the state government.

But, in the second place, a city is something more than a part of the state; a citizen of a city is something more than a citizen of the state. For just so soon as a great number of people gather together, and this is what constitutes an urban community, new needs develop which must be attended to through some method of social co-operation. These needs, during the existence of a community as a rural community, are purely individual needs and can be advantageously attended to by purely individual action. But just so soon as the rural community becomes an urban community, they cease to be individual needs. For individual action cannot attend to them at all, or cannot attend to them advantageously. To be more concrete, in a rural community an individual obtains his water by digging a well or tapping a spring in the neighborhood. If he wishes to get rid of the débris occasioned by the exigencies of domestic life, he can do so perfectly easily without endangering either the health of his family or that of his neighbors. He can also easily keep the road in front of his house in a cleanly condition. Indeed, its being kept in a cleanly condition depends very largely upon his own acts, and any uncleanliness can be easily remedied by a little extra exertion upon his part. In all of these cases, in order that needs, which in a rural district may be satisfied by individual action, may in an urban district be satisfied either at all or to advantage, it is necessary that individual action towards their satisfaction shall give place to social action. There must be social co-operation among the individual members of an urban community to a very much greater extent than is necessary or even desirable in a purely rural district.

Now, in order that these various functions, which are of necessity discharged within the limits of an urban community, may be discharged advantageously, it is necessary that there be a form of organization somewhat different from that of the state as

a whole. As a general thing, if we study the history of any particular city, we shall find that it has developed in somewhat the following manner: It was originally a rural community, and as such, was governed in accordance with the general scheme of administration adopted for the state as a whole. Just as soon, however, as an urban community developed within one of the regular rural administrative districts of the state, such as the county or the town, the demand was made for the establishment in that urban community of what is usually called a borough or a village organization. This village or borough organization, which is an organization quite distinct from the organization of the county or the town in which the borough or village is situated, was formed, not for the transaction of the general state business which thereafter, as before, was attended to by the county or town organization, but exclusively for the discharge of these purely local functions which the development of a compact population within a small district had made necessary. The village or borough gradually increased in population. The outlying districts of the county or town adjoining it and of which it formed a part, were gradually overrun by the population of the borough or village as it increased, and as these outlying sections became compactly peopled, they were added to the borough or the village, and became subject to the borough or village authorities. Suddenly the people awoke to the fact that the borough or village had, as a result of its continuous expansion, gradually come to contain pretty nearly all of the population and much of the territory of the town, or it may be, of the county in which it was situated, and the question naturally arose: Is it wise to continue alongside of each other, but having jurisdiction over the same people and the same territory, two separate organizations, *i. e.*, the town or county and the village organization? Not only does the existence of two separate organizations result in a waste of effort and in unnecessary officers, but also matters which must be attended to in a rural community by governmental action assume a different complexion when that community becomes an urban community. Perhaps the most marked instance of this is to be found in the case of the courts having a minor criminal jurisdiction, commonly known as police courts. Throughout the rural communities, the ordinary officer who attends to this business is

known as the Justice of the Peace, but the business so increases with the increase of population that the office of Justice of the Peace pure and simple becomes inadequate for the performace of the work devolved upon it, and police justices are provided.

We therefore find that the growth of a rural into an urban community not merely develops new needs which must be attended to through new forms of social co-operation, but also it so changes the complexion of governmental functions formerly attended to, that a special organization is necessary for their advantageous discharge. The result of the development of an urban community of any size has been generally a consolidation in one form of organization of both purely state and local organizations. It is this union, which is evidenced by a charter of some sort, that we call a city. The city thus formed originally for the satisfaction of local needs becomes as a result of reasons of convenience, if not of absolute necessity, also an agent of the general state government. It is not, of course, necessary that all matters of state interest attended to within the limits of such an urban community shall be put into the hands of the municipal organization formed through the grant to such an urban community of a charter of incorporation. In a country where ideas of decentralization and local self-government are dominant it is, however, practically necessary that many matters of state concern which need local attention shall within the limits of the city, be attended to by the municipal organization. It is therefore the fact that, in the United States, where the general scheme of administration is highly decentralized, the city is a most important agent of the general state government, as well as an organ for the satisfaction of purely local needs. Such then is in theory the position of the city. Such is in theory the position of the city, not only in the United States, but also in Europe. Of course it may be that in one country the city has more functions of state agency to discharge than in another country, but in all countries the city is not only an organization for the satisfaction of purely local needs, but it is also an agent of the state government.

The fact that a city occupies the position which has been described, leads to two concrete results: In the first place the fact that a city is an agent of the central state government makes it

necessary to give to the central state government some control over it. The state cannot, with due regard for its own safety, permit municipalities or their officers free hand in the discharge of their functions of state agency. For if anything is proven by English and American administrative history, it is that uncontrolled local administration of general matters both leads to great lack of administrative uniformity and harmony where uniformity of treatment is necessary, and is slovenly and inefficient. The most noted example of this fact is to be found in the administration of the English Poor Law of the Seventeenth Century. The evils which resulted from the way in which local authorities administered this law are too well known to make anything more than a mere reference to them necessary. We have however, nearer home, an example of the inefficiency of uncontrolled local administration of laws regarded as of general interest in the case of the Prohibition and Excise Laws in the United States. In the case of the English Poor Law the local authorities which were the Justices of the Peace made use of the large discretionary power granted to them, in the interest of the locality they represented, totally disregarding the interests of the state at large. In the case of prohibition and excise laws, local and particularly municipal authorities in the United States have very commonly refused or neglected to exercise powers regarded by law as purely ministerial, where they have considered the enforcement of the laws to be opposed to the interests of the communities they represented or to the feelings of the local inhabitants. Whether local authorities act rightly or wrongly in such cases is not to be determined here. It is undeniably the fact however, that this is the attitude they assume. Other instances of the inefficiency of a purely local government due either to positive intention or to neglect of local authorities in the administration of matters of general interest might be cited; but it is believed that what has been said is enough to show that if uniformity of administration of matters of general interest is needed, uncontrolled local administration of these matters is not the way to obtain it.

In the second place the fact that a city is an organization for the satisfaction of local needs makes it necessary that its action be determined by local considerations. To this end it must have large local powers. If, on the one hand, sufficient account is not

taken of the important functions of state government which the city discharges, lack of uniformity in the administration of matters of general concern, where such uniformity is one of the prerequisites of efficient administration, will result. If, on the other hand, sufficient attention is not directed to the fact that the city is an important agent for the satisfaction of local needs, the city loses its power of local action, and any vigorous municipal development is made impossible.

Such being the position of the city, such being the results which follow upon its position, it is of the utmost importance that the position assigned to the city by the law of the state shall be the correct one. This, indeed, is *the* problem of distinctively municipal government. In comparison with it the problem of organization is insignificant, for we may change in its details the organization of our municipalities, we may provide that this officer shall be elected by the people or that officer shall be appointed by the Mayor, but we will not have solved the problem of municipal government until we devise a law which, on the one hand, will provide the necessary control over those functions of municipal administration which interest the state as a whole, and on the other hand will grant to the municipalities sufficient powers to permit of municipal development and efficient municipal government in accordance with local considerations.

How, now, should the necessary control which we have seen must exist, be exercised by the state over the municipality? The two systems of control which have been adopted in the different states of the world are, on the one hand, the legislative control; on the other hand, the administrative control. The legislative control is the system which has been adopted in this country. It is, however, rather the result of accident than of premeditation. It has already been said that our general scheme of administration is an extremely decentralized one. By this we mean that the general laws of the state are in large part to be enforced by locally elected officers. The result of the enforcement of laws of general interest by locally elected officers is that there is practically no central control of an administrative character possible of exercise over them. For officers elected by a locality cannot very conveniently be removed by state officers; they serve short terms, are supposed to be directly responsible to the local people, and if unsatisfac-

tory, are not re-elected. Under such a scheme of administration any such thing as a central administrative control is impossible. Therefore, if it is deemed advisable to change in any way the manner in which local officers discharge their duties, resort must be had to legislation. A decentralized administration, therefore, results in a very detailed legislation, the legislature being, in a state which has adopted a decentralized administrative system, practically the only body which can secure uniformity where uniformity is necessary. Our entire legislation with regard to the duties of local officers has therefore descended into the greatest details, and the courts are relied upon to see to it that these details are observed by the local officers in their execution of that legislation.

While such a system has unquestionable advantages in preventing arbitrary action on the part of public officers, it has as unquestionably singularly unfortunate effects upon the city. For the powers of cities as public authorities are enumerated in detail by the legislature. No legislature, however far-seeing, can anticipate all a city's needs. New needs are continually developing; new powers must be exercised. In accordance with our system of government, however, no governmental power can be exercised which has not been granted to the city by the legislature; hence, the cities are continually appealing to the state legislature for new powers. The legislature being accustomed to regulate minor matters of municipal administration on the application of cities has also of recent years fallen into the habit of regulating local matters when not so called upon. In other words, it has extended its control beyond proper limits; and, being dominated by the state and national parties, is apt, in its regulation of such local matters, to give to purely partisan interests greater consideration than it gives to local needs. Particularly is its exercise of the power to determine the municipal organization in its details susceptible of abuse. It has been quite common in the recent past for the state legislature to change details in the organization of particular cities so as to obtain partisan political advantage for the party controlling the state government. Indeed, this has been done so frequently that in many cases it is difficult to understand the charter history of a particular city, without quite an intimate knowledge of the his-

tory of party politics of the state. Many anomalies in city charters can be explained only by the knowledge that a particular party was in power in the legislature at the time they became parts of the charters and desired by the change to obtain a party advantage.

Now, this legislative control not only is exercised by a body which, in the nature of things, is political in character, and which uses its powers for partisan purposes—it has also shown itself to be inefficient. This is brought out most clearly when we come to consider the question of municipal indebtedness. In all countries the attempt has been made to provide some limit to municipal indebtednesswhich the municipality should not overstep. In this country in accordance with our general system of government, this limit was until recently usually fixed by the state legislature. It was so fixed as a result of the adoption of the principle that a municipality had no power to borrow money without legislative authorization, but the legislatures have been so prodigal in their grants of power to the municipalities to borrow money, that the people have had to take the matter in hand and fix in their constitutions, limits beyond which the legislative authorization should have no effect. As a general thing at the present time, the state constitution provides that no municipality shall incur a debt beyond a fixed per cent of its assessed valuation.

It may therefore be said that the method of legislative control as developed in this country is a failure. It is a failure in the first place because it is liable to be extended beyond its proper limits. It is a failure in the second place because it is exercised by a body of necessity dominated by political parties, and has, therefore, been exercised for partisan purposes. It is a failure finally because it is inefficient. That it is a failure is to be seen from the fact that in very many states of this country the attempt has been made to forbid the legislature to pass any special act with regard to municipal corporations.

About the middle of this century it was seen that special legislation was not only resulting in bad city government, but was also exercising a corrupting influence over the members of the legislature, who were apt to trade bills with each other through the process commonly known as "log-rolling." The attempt, however, to improve the government of cities by prohibiting special

legislation with regard to them has itself been in almost all instances a failure. By many it is believed that the failure has been due to the fact that the courts in their determination of what were special acts were too lax. But the laxness of the courts was necessary. Under any system of government which provides for a detailed enumeration of the powers of municipal corporations special legislation is absolutely necessary and cannot be stopped by the mere adoption of a constitutional prohibition. It is necessary for this reason: It is impossible to frame an act relative to the details of city government which can be advantageously applied to all cities within a state at a given time or to one city for any length of time. The legislature, therefore, under the guise of classifying cities passes acts general in form but actually special in their application. Such classification of cities, which descends into great detail, is usually upheld by the courts as constitutional.

Classification of cities in acts purporting to be general has not only resulted in special legislation, it has also introduced uncertainty into the law. For under the *régime* of classification specific cities have so many earmarks in the different statutes passed relative to them that it is often difficult to tell whether a specific statute applies to a specific city. Cases have been known also where a statute intended to apply to one city has been held by the courts to apply to others, with the result of disturbing conditions which were perfectly satisfactory and which it was not intended to change.

When we consider the failure both of our method of determining the position of the city and of exercising a control over it, and of our attempts to correct by constitutional provision the evils springing therefrom, we are naturally led to ask the question; What method of determining the position of the city and what kind of control over it offer greater hopes of success? It has already been shown that the main cause of our trouble, the main reason why the position of the American city is as it is, is to be found in the rule of law which has come to be firmly fixed in American jurisprudence, that the city is an authority of enumerated powers and must look to the legislature for authority for everything which it does. The application of this rule has led, in the first place, to an enormous amount of special legislation;

in the second place it has led to the determination by the legislature of questions of local policy, with the result that such questions have been determined not in accordance with local considerations, but have been, much more than they ought to be, influenced by considerations of state and national politics.

On the Continent, different from the United States, the city is not regarded as an authority of enumerated powers, but as a political corporation vested with all powers which it has not been expressly or impliedly forbidden to exercise. In many instances, however, particularly in those instances where it is recognized that the city is acting in the interest of the state government, it is subjected to a central control. This control, however, is not exercised by a legislative body, but by a responsible administrative body, which is not subject as a legislature of necessity is, to the influences of purely party politics. To be more concrete: If a city, as is usually the case, is given the charge of the administration of the schools, being regarded in this instance as distinctively an agent of the state, it is obliged to administer the schools under central administrative supervision. If it does not come up to the standard demanded by the law as interpreted by central administrative officers, these officers, broadly speaking, may step in and force the city to come up to the standard required. The same is true of other branches of administration interesting the state as a whole, such as sanitation and police.

Again, where the city desires to enter into an undertaking which will require the expenditure of a large amount of money to be obtained through borrowing, it is necessary that it obtain the consent of some central administrative body which will determine after a consideration of the facts of the case, upon the expediency of the undertaking, and upon the ability of the city to make the necessary expenditure therefor. The same is true of the matter of taxation. Within certain limits the city may raise what money it wishes. If it wishes to exceed those limits, it must obtain the consent of some central administrative body which also has the power, in case certain duties of a pecuniary nature are imposed upon the city, to see to it that the city performs them.

Such is the method adopted on the Continent for determining the position of the city and exercising the necessary control over

it. It is a method which at first sight is quite repugnant to American ideas. It savors both of state disintegration and centralization; but if we are to judge of it by its results, we cannot refrain from giving it almost unstinted praise. As to the centralization characteristic of this method, it is to be remembered that it is really no more centralizing than the method which we have adopted. The centralization, so far as it exists, is administrative instead of being legislative as with us, and as a matter of fact the degree of centralization that does exist is not by any means so great as in this country. As a result of the principle which recognizes cities as authorities of general powers, they are able to enter into undertakings without asking the consent of any central authority in the state which no American city would dream of going into without first applying to the legislature for authority.

A further result of this method of determining the position of the city is that the determination is made by general law, which is general in that it applies to all cities, and in that it formulates merely a general scheme of organization applicable to all cities. This plan so far as its details are concerned may be adapted by each city to suit its own needs. All of the details with regard to the internal organization of the city which we find in our American city charters, and which are particularly marked in the recent charter adopted for the City of Greater New York are absolutely absent in the general municipal corporations acts passed upon the Continent.

This scheme which was adopted upon the Continent at quite an early date has practically been adopted in England during the last century. The Municipal Corporations Act of 1835 applied to all cities within the Kingdom, and with its amendments has been re-enacted in the Consolidated Municipal Corporations Act of 1882. While in accordance with English precedents this Act does not go to the same extent as do the Continental municipal corporations acts, in granting powers to the municipalities, it still does grant them very much larger powers than are usually given by the ordinary American municipal charter, or general municipal corporations act. Among other things it certainly does give to each city the right of determining the details of its own internal organization.

Further, both on the Continent and in England, owing to the more centralized character of the general state administration, few matters of general interest are attended to by the city independently of central control. Thus in England the city has nothing to do with the administration of the poor law, the excise and the schools, and when acting as the sanitary and police authority acts subject to central administrative control. For that reason the national parties do not have as much temptation as in the United States, where the city is such an important agent of state government, to interfere in municipal politics, since questions of general policy are not only regulated by general law, but administered under central supervision. As a result of this fact, and also of the fact that the opportunities for interference to the detriment of the municipality are not so great as here, owing to the absence of special legislation and the existence of central administrative control, municipal issues are determined in accordance with municipal considerations much more than in this country.

This is the case notwithstanding the fact that purely municipal parties are almost unknown. It may be said that the only large city of any importance in either Continental Europe or in England where distinctively municipal parties have been developed is the City of London. Elsewhere the elections for municipal officers are fought out between the national parties; and, indeed in England where at one time this was perhaps not so much the case, it is becoming more and more the rule that the city elections shall be contested, and that the contest shall be between the nominees of the regular national parties.

But notwithstanding this fact, it cannot be said that municipal government in Great Britain has shown any marked tendency towards deterioration. It has not shown such a tendency because of the fact that when the parties do get their nominees elected in these municipal councils, the position of the council and of the city is such that they cannot make use of the power they have thus obtained to further party ends. For, as has been said, special legislation is as compared with the United States, practically unknown in England, and Parliament cannot be made use of, as can our state legislatures, by the national parties, to prostitute the municipalities in the party interest; while the central

administrative authorities do much to prevent the national parties from using the cities for the purpose of subserving party ends.

But not only has the adoption of the Continental system of determining the position of the city and of exercising the necessary control over it had the result of emancipating municipal government in Great Britain from the evil domination of national political parties, it has also afforded large opportunities to local initiative and in that way aroused local pride. The general efficiency of the municipal administration has also been greatly increased. Space does not permit any detailed treatment of this subject, but it can be said, without danger of contradiction, that the tremendous improvement in poor law administration, school administration and public sanitation is very largely due to the existence of central administrative control. At the present time in all these branches of administration, the standard is fixed by the central administrative authorities, which can force the localities to maintain it.

Not only is this central administrative control exercised over these branches of administration, but the central administrative supervisory authorities have very large powers over the local financial affairs of the municipalities, particularly in so far as the power to borrow money is concerned. Their power has been exerted both to prevent cities from borrowing too heavily and also to introduce right principles of municipal finance. The reports of cities as to their various financial transactions which are filed with the Local Government Board, and which are published under the title of "Local Taxation Returns," offer a veritable mine of information as to the workings of municipal government, always accessible to the statesman and the student.

The experience of European countries is then that the exercise of central administrative control over those functions of government discharged by cities, but interesting the state as a whole, has, when combined with large grants of power to cities as to purely local matters, the effect of assuring to cities large local autonomy, of safeguarding the interests of the state as a whole and of permitting the determination of local issues in accordance with local needs.

The experience of England is particularly instructive. Under the *régime* of detailed enumerated powers and legislative control

through special legislation the English cities were inefficiently governed and were prostituted by the national parties in the interests of national politics. The Municipal Corporations Act of 1835 took the first step in granting them large local powers. Subsequent legislation has subjected both the discharge of governmental functions affecting England as a whole and the management of municipal finances to the supervision of central administrative bodies—particularly the Local Government Board. The result has been that English municipal government is now held up as a model to be copied both as regards its efficiency and its freedom from the tyranny of the national political parties.

Finally the limited experience that the United States has had goes to show that the abolition of special legislation and the substitution therefor of either judicial or administrative control has been followed by the most beneficial results. Years ago divorces were obtained by a special act of the legislature. This method has now been abandoned and divorces are granted by the courts under the provisions of a general law. Again in the early part of this century private corporations were formed by special act, but the resulting scandals led to the grant of charters by state administrative officers acting in accordance with the provisions of a general corporations act. So we might go on. The same is true of the state control of banks, insurance companies, railways and schools. The State of Massachusetts has gone so far as to substitute for legislative control of gas and electric lighting companies the supervision of a state board. In none of these cases would a return to former methods of legislative control be thought of for a moment.

Is it not time for us to apply to our municipal corporations the methods of administrative control which have been so successful when applied both to European municipal corporations and to those subjects which in this country were formerly under legislative control? Indeed, a movement to subject municipal corporations to administrative control has been already initiated in New York. The Fassett Committee, seven years ago, at the same time that it proposed the passage of a general municipal corporations act, advocated obliging cities to keep their accounts in a uniform manner. The Commissioners appointed in 1895 to draw up general municipal corporations acts for cities of the second

and third classes united in recommending the establishment of a "Municipal Government Board" which should exercise a supervision over the finances of the smaller cities of the state. It is unfortunate, in view of the benefits which in other countries and in other directions in this country have followed the establishment of such boards, that so little attention has been directed to this proposition. It is to be hoped that those interested in the improvement of municipal government will give it their serious consideration and unite to further a reform from which experience goes to show much good may be expected.

CIVIC SERVICE OF THE MERCHANTS' ASSOCIATION OF SAN FRANCISCO.

BY J. RICH'D FREUD.

FORMATION OF THE ASSOCIATION.

"City government is business, not politics." The plain truth of this aphorism gave birth to the Merchants' Association of San Francisco. Three and a half years ago, forty-seven public-spirited merchants met together for the purpose of improving the municipal conditions then prevailing in San Francisco. With full confidence in the justice of their cause, but with wavering doubt as to the success of their course, this handful of volunteers essayed the arduous task of municipal improvement.

The forty-seven charter members adopted a Constitution that made all business firms in good standing eligible to membership and allowed each firm one vote in the organization. The dues were fixed at the nominal figure of one dollar per month. At the end of the first year 214 members had signed the roll. During the second year the membership increased to 406 business firms. At the end of the third year 817 firms were recorded as regular members. To-day, the official roll of the Merchants' Association comprises 915 business firms in the City of San Francisco. Comparatively speaking, this Association is now numerically stronger than any other commercial organization in the United States.

Its government is vested in a board of fifteen directors elected annually by the Association. The officers of the board comprise the president, two vice-presidents, the treasurer and the secretary, who is not a director. Three standing committees of five directors each are appointed by the president, viz., on public affairs, on publicity and promotion, and on trade and finance. Among the employees of the Association are the attorney and counselor, the civil engineer, the superintendent and the stenographer. Regular meetings of the Association are held quarterly and the board meets regularly twice each month.

To keep all members as well as the public constantly familiar

with the work and aims of the Association, "The Merchants' Association Review" was created. It is an eight-page publication containing original articles and editorials upon municipal questions as well as the official list of membership. It is issued monthly and 5,000 copies distributed without charge to members and to persons interested in subjects of municipal concern. A striking feature of this publication is the entire absence of advertisements. A copy will be cheerfully forwarded to any reader of "MUNICIPAL AFFAIRS" who may make application.

FIRST POINT OF ATTACK—CLEAN STREETS.

"What can be done to improve the streets of San Francisco?" was the first subject of discussion immediately after the permanent organization of the Association. Dirty, dusty streets, badly swept by contract without system or order, confronted the taxpayers of the city. Believing that clean streets are one of the prime requisites of a progressive city, the Association determined as its initial effort to correct this glaring evil.

It was decided to make an experiment to ascertain correct and reliable data. Preliminary plans were prepared for a practical trial in street cleaning. The attention of every merchant was called to the necessity of clean and wholesome streets. As a beginning, the Association offered to clean and keep clean any block in a certain district of the city, provided the merchants in the block subscribed not exceeding ten cents per day for stores of not over twenty-five feet frontage, and in like proportion for larger establishments. Nearly all merchants cheerfully subscribed, and the experiment proved eminently successful.

THE CITY CONTRACT UNDERTAKEN.

Encouraged by this preliminary effort, the Association determined to undertake the city contract for cleaning the public streets, mainly as an object lesson to the entire municipality. By offering an extremely low bid, the Board of Supervisors awarded the contract to the president of the Association, and the board of directors became his bondsmen for the faithful execution of the work.

The $80,000 appropriated annually by the city and county for cleaning the streets was found to be inadequate to do the work properly and thoroughly. Nearly $30,000 therefore, was raised

by voluntary subscriptions from merchants and property owners. This sum, added to the city appropriation, enabled the Association to execute the contract successfully during a period of eight months.

Not only were the necessary additional funds provided by the merchants of the city, but every detail of this street cleaning contract was planned and managed by the officers of the Merchants' Association. It was a most striking illustration of the wisdom and policy of having capable business men to superintend municipal affairs. Wherever possible hand labor was substituted for sweeping machines. Over two hundred and fifty deserving workingmen were thus given steady employment and their families kept from want and destitution.

So successful and satisfactory was this practical experiment that plans and specifications for perpetuating the system were carefully prepared and submitted to the city authorities. The Board of Supervisors approved and repeatedly adopted the system thus inaugurated. The streets of San Francisco to-day are swept and cleaned according to these specifications and under the constant supervision of the superintendent of the Association. Residents and visitors now note with pleasure and pride the comparatively clean streets of San Francisco, and the efficient work of the Merchants' Association in this direction has won the admiration of the entire community.

STREET PAVING.

San Francisco possesses one hundred and sixty miles of accepted streets. Owing to its many hills, the use of cobblestones was made necessary upon streets of high grade and originally were laid also upon many level streets. Subsequently, basalt blocks and bituminous rock were introduced upon a number of the principal streets. As a rule, the residence portion of the city was fairly well paved, but the pavements in a considerable portion of the business district were in a most deplorable condition at the time of the inception of the Merchants' Association. It was decided, therefore, to remedy this evil as far as possible within the power of the Association. Under the law, the city is obligated to keep accepted streets only in needed repair. Any necessary repavement must be provided by the adjacent property owners. By strenuous efforts the Merchants' Association has succeeded in securing suffi-

cient voluntary subscriptions from property owners to repave some of the principal blocks of the city. A number of the worst-paved blocks in the business district have been repaved with smooth, modern pavement through arrangements consummated by the Association, whereby the city and the abutting property owners contribute equally to the improvement. Moreover, to illustrate the advantages of various paving materials, a notable exhibition was held by the Association, where samples of asphalt, bitumen, wood, brick and basalt blocks were exhibited to the public and their merits explained to the city officials.

IMPROVED STREET LIGHTING.

The streets of San Francisco have been poorly illuminated at night by about 5,000 obsolete gas lamps, supplied by a private corporation at a cost to the city of $300,000 a year. The advent of electricity marked a new era in illumination and many progressive cities promptly adopted this powerful generator of light. Fully realizing the benefit of this modern method of public lighting, the Merchants' Association resolved to give San Francisco another object lesson. As the city was bound by a two years' contract, nothing could be done speedily to make an official change. Voluntary subscriptions, therefore, were again solicited by the Association for the installation of arc lights upon a few principal business streets. The idea at once became contagious and other streets asked the privilege of joining the movement. Subscriptions of merchants and property owners amounting to $15,000 were quickly signed, and 228 powerful electric arc lights of 2,000 candle power each were suspended along the center of the main thoroughfares of the city. The experiment has been a success, and it is safe to say that San Francisco will no longer be satisfied with the previous inadequate method of illumination. As soon as the present city contract expires, the Merchants' Association will endeavor to have this improved system of street lighting permanently adopted by the municipality.

OTHER BENEFICIAL RESULTS.

It would exceed the limits of this article to recount the many achievements of the Merchants' Association. Whenever any positive evil or defect in the management of city affairs seemed possible of judicious correction, the Merchants' Association has not hesitated to exert its influence. No

restriction has been made in the range of its activity. For example, all street corners have been supplied with needed street signs, and the corridors of the City Hall provided with convenient guides. The street-car transfer system has been so perfected that a five-cent fare is now good for a ride from any one point in the city to almost any other point. A suitable site has been provided for the Wilmerding School of Industrial Arts with its valuable endowment of $450,000, destined to train the boys of San Francisco in useful mechanical trades. Many other works of benefit to the city have resulted from the determined and persistent efforts of the Merchants' Association.

A NEW CHARTER FOR SAN FRANCISCO.

The present city government of San Francisco is obsolete, defective, uncertain and chaotic. It is based upon innumerable special acts of the State Legislature passed during the last forty years, and it is needless to say that the present Consolidation Act with its numerous amendments no longer fills the requirements of a progressive city. Every year intensifies the dilemma, until it may now truthfully be asserted that the $6,000,000 absorbed annually in conducting this city government is twice as much as it need be under a proper municipal charter.

Keenly realizing the imperative need of a new organic law, the Merchants' Association with its accustomed will and energy has entered upon the difficult task of securing the adoption of a modern charter by the people of San Francisco. At its request a charter convention of one hundred representative citizens has been appointed by the Mayor of the city to prepare a municipal charter. Only three conditions for eligibility to this convention were required; namely, a belief in the principles of civil service, economical administration, and home rule in city government. This body is now in session and will shortly submit its work to a board of freeholders to be elected next month, and who in turn will submit a charter to the electors of the city for ratification. Eight of the fifteen directors of the Association are members of the charter convention, the president of the Association being its first vice-president and the secretary being also the secretary of the convention.

REASONS FOR SUCCESS.

The frequent failure of most civic organizations to achieve suc-

cessful results leads us naturally to inquire the true causes that have produced the success of the Merchants' Association. Continued success or failure of an organization has certain reasons beyond mere circumstances, conditions or persons. It is true that the Merchants' Association has been exceedingly fortunate in securing and retaining as its president, F. W. Dohrmann, a public-spirited merchant, whose devotion to the duties of his honored position are second only to his unselfish interest in the general welfare of the city. The Association has also been favored each year with a board of directors, composed of patriotic and progressive citizens. But with all due allowance for these favorable conditions, there are, nevertheless, a number of fundamental principles that have conspired to produce the past and present success of the Association, and will, we believe, permanently insure its future. What are the cardinal principles underlying the Merchants' Association?

The injection of party politics has probably wrecked more civic organizations than any other one cause. The moment partisan interests are permitted to enter the portals of a purely municipal body, its work degenerates and its usefulness ceases. Politics and business in city affairs cannot be fused any more than oil and water. Political manipulation will gain control and personal patronage will sink civic fealty. Party politics are, therefore, strictly excluded from the proceedings of the Merchants' Association. Although the influence of the Association is constantly exerted in measures of public interest, no part is ever taken in party politics or political patronage.

Indiscriminate abuse of public officials is both unwise and unfair. It not only discourages the faithful discharge of public duties, but seriously cripples the body making the charges. The Merchants' Association never resorts to personal abuse or vituperation. On the other hand, it is one of its principal rules to cooperate wherever possible with public officials in carrying out all ordinances and laws for the comfort, safety, health and prosperity of the community. This conservative and sensible course does not preclude just criticism and rebuke of dishonest or obstinate city officials, nor does it prevent the proper correction of wrongful or misdirected official conduct. Cautious and considerate action on the part of the Association to do exact justice in all its efforts has won the confidence of the people and the

respect of all persons connected with the city government. Scarcely a week passes without some beneficial interchange of ideas and suggestions between the Merchants' Association and the Mayor, the Board of Supervisors or the various heads of the departments of the city government.

The power of the press to help or hurt any cause is clearly apparent in all communities. Possibly the press of San Francisco wields an exceptionally strong weapon. As in all business ventures, keen rivalry and competition exist between the various newspapers published in any locality. News or favors extended to some naturally lead to the resentment of others. There is but one safe and sure course for any civic organization to pursue, and that is the strictest impartiality and candor to every newspaper. The representatives of the press visit the offices of the Association daily. It is an invariable rule to extend to all alike the utmost courtesy and service. Printed reports of meetings, resolutions or contemplated action of the Association are prepared expressly for the press. This results in a correct and accurate transmission to the public of the proceedings of the Association. Between the officers of the Association and the proprietors, editors and reporters of the seven dailies published in San Francisco, there exist the most cordial and friendly relations.

A common failing of reform organizations is to aim far above or far below the mark. It sometimes seems as if they were after phantoms or visions. The worst afflictions of municipalities are ordinary ones, and they should be handled and treated in an ordinary manner. To attempt to make the world perfect is to fail even to make it better. It is this lack of practical ideas, or rather practical methods, that frequently kills reform movements. The first inquiry of the Merchants' Association, before attempting any change or improvement, is to ascertain carefully whether the proposed work is feasible and the contemplated plan of action practicable. If not, the matter is at once dismissed or postponed to a more auspicious time. In this way wasted energy is saved and only reasonable and practicable tasks are undertaken. It is far better not to try where failure is inevitable.

From the foregoing narrative, it might be inferred that the Merchants' Association does nothing of direct or immediate benefit to its members. This, however, is an error; for the Association affords many direct benefits to its members in their business

affairs. Aside from the professional services accorded without charge to all members by the attorney, the engineer and the superintendent of the Association, several important movements have been projected for increasing the trade and commerce of San Francisco. Plans of the Association are now under way for directing the thousands of explorers about to go to the Alaska and the Klondike gold regions to the marked advantages of outfitting in this city. Competitive transportation by land and by sea has been materially encouraged, and in other ways the Association is ever ready to strengthen and extend the commercial supremacy of this metropolis. In all projects, however, the Merchants' Association steadily adheres to the sound doctrine that the just claims of the public transcend those of any private individual. It has always subordinated the benefit of any class to the welfare of the whole people.

The highest aim of the author of this article has been lost, if this unvarnished record of the civic service of the Merchants' Association of San Francisco does not tend to inspire the true friends of municipal progress with well-grounded hope for future improvement in the management and operation of American cities. What has been done and will yet be accomplished by the Merchants' Association of San Francisco may equally well be achieved in every municipality in the United States. The recent advent of the business man in municipal affairs is the most encouraging omen in the dark annals of the municipal history of our country. Let us urge him on in this patriotic work of saving our cities from the ruthless hands of the political spoilsman. Our national government has safely passed through many critical crises in the hundred years of its existence; our State governments have bravely encountered the trying ordeals that threatened their sovereignty; the crucial test in the life of our country is now the successful reformation of the cities of the Republic.

GREATER NEW YORK A CENTURY HENCE.

By George E. Waring, Jr.

If the population centering in New York increases during the next hundred years as rapidly as it has during the past fifty years it will comprise probably twenty million souls. It would be futile, of course, to attempt to predict, with even a probability of accuracy, what the character and conditions of life of that community would be.

Judging from the building progress of the past twenty years, Manhattan Island will be covered, aside from its great public buildings and their ornamental and roomy surroundings, and the parks, which are forever dedicated to the use of the people, with architectural monstrosities which the skyscrapers of the present day portend. It is not unlikely that the whole island will be largely abandoned as a place for residence. Staten Island will be given over to shipping, longshoremen and unsavory industries. The whole western side of the harbor below Jersey City will be filled with docks, warehouses and railroad terminals. The beautiful ridge on the west side of the Hudson and all the northeastern portion of New Jersey, as well as the upper portion of Westchester County and the whole of Long Island, will become one vast residence region, save for the frequent manufacturing centres which will be established in favorable localities.

No More Tenement Houses.

How the people will live it is impossible even to guess, but it is not likely that they will live in the closely huddled habitations of the present day. The indications are these: The tenement house will be unknown, and no man, rich or poor, will live in a house of which every room does not open freely to the outer air. The present tendency to aggregation and conglomeration will yield to Heaven knows what method of free, easy and cheap transportation. He would be a bold man who, recalling the short interval of time between the days of the ubiquitous omnibus and the rapid and pleasant trolley car of to-day, would venture to predict what will be our means of urban travel. A quarter of a cen-

tury ago no one would have believed that old and young, rich and poor, would be flying about our streets and over our country roads on rubber-tired bicycles. It would have been as absurd to predict then what we are now so familiar with as to predict now that there will be some safe and universal method of aerial or subterranean mode of conveyance.

The problems of municipal engineering are no less difficult to adjust in view of the great possible changes of method and arrangement. For example, to supply a population of twenty millions with water, according to our present system and at our present rate, would be practically impossible. It would involve the forcing of rivers of water from Lake Ontario, and the waste water of the great community would foul both shores of Long Island and the entire Hudson. The lower bay would be a cesspool.

As a mere matter of fancy I have for some time considered the ultimate result of an experiment which I made on the wharf over the main outlet sewer at Newport in the summer of 1894. Sewage was pumped into filter tanks, which were supplied with abundant air (oxygen) to stimulate and facilitate the development of the bacteria by which the oxidation and nitrification of foul organic matter is effected. That system has now been applied in practice to filters which are purifying 100,000 gallons per day. Within the short space of four hours foul sewage is purified to the drinking water standard. I do not venture to predict, but I do say that it is possible that the development of this process will suffice for the purification of all the liquid wastes of all of this vast population. At Newport the sewage was purified to the drinking water standard—bright, sparkling, odorless and palatable. Not only did I drink it myself, but it was drunk without question by half a dozen of the officials of Providence who came to visit the works.

Is it entirely beyond the realm of possibility to suppose that the public authorities at the end of the next century will furnish to the people, not water, but compressed air? That the sewage flowing from every house will be purified in filters of the character indicated—aerated by air under pressure, and by the same pressure forced to reservoirs in the tops of the houses, from which it will flow to be used again? That is practically nature's way of purifying foul water. It is sent back to us through the medium of rain, earth filtration and river-feeding springs.

Horses Will Be Unknown Here.

So far as we can now see, much, if not all, of the work of lighting, heating, and transportation will be performed by electricity under the great development it is to receive at the hands of men of genius like Nikola Tesla. One thing seems very sure—coal and wood will cease to be used for fuel, and the atmosphere of the city will be as free of smoke as the houses and streets will be of ashes and dust. Domestic animals will cease to be domesticated within the limits of towns. Indeed, I believe that twenty years will not elapse before the horse will be unknown in New York, and that automobile carriages and trucks will entirely supplant the vehicles of to-day. Heavens! What a relief this will be to the Department of Street Cleaning. In fact, there seems to be no end to what one may imagine as to the material changes that are to take place in our modes of life.

But all of these changes, great though they will be, will be as nothing compared with the changes that are to come over the people themselves and over their government. As to the people who will make up the vast community of New York of a century hence, I think we may be most hopeful. There has never been, within the memory of any person living—if we except, perhaps, the devastations of the war—any period of five years that was not better than the five years preceding it.

Calamity howlers and pessimists have said, from time immemorial, that the world was going to the demnition bow-wows, but the world has never failed to postpone to an indefinite time the realization of their fears and to march steadily on toward better things. In my judgment, our salvation from the impending disaster depends upon two great facts: One is the constantly improving condition of public education, and the other is the constantly increasing interest of the people themselves in what ever may affect their public and private welfare.

Influence of the Public Schools.

The public schools of New York are marvellous—not so much for the mere book instruction that they are giving to the children of all classes of the people as for the influence that school life is exerting on the children's character. It has been my good fortune to see a great deal of the public schools of this city, and I have never ceased to marvel at the good order, the good training,

the cleanly appearance and the individual ambition of children, even of the lowest class, brought in from the streets and subjected to the influence of competition in all matters appealing to their ambition. The value of the reflex action on the character of parents and their pride in sending their children to school in tidy condition cannot be overestimated.

The interest shown by the school children of all classes in the organization of the juvenile street-cleaning leagues and in the civic organizations established by Mr. Gill, of the Patriotic League; the avidity with which they acquire information as to the minor details of government; the idea that is beginning to prevail among them that government means something more than the policemen to be run away from—as when building bonfires in the street—and the interest that they show in everything affecting public welfare—these alone are enough to give one the most confident hope for the future.

Other Stimuli of Progress.

There are two other influences which are working most effectively throughout the whole community. One is the series of public free lectures given in the public schools under the direction of Dr. Leipzinger, where crowds of intelligent, earnest men and women drink in eagerly the information laid before them, to their and our lasting good. The other is the formation of fellowship clubs and associations, largely under the direction of the University and College Settlements and kindred organizations. These are gatherings mainly of young men eager to improve their condition, and to secure for themselves and their neighbors the improvement that their united action can effect.

The tendency toward the formation of these associations is extending rapidly, and the indications are that within a very few years every little community—certainly every Assembly district—will have an organization, properly guided, but left free for such action as it may desire, looking to the bettering of local conditions and to the exertion of useful influences on those who have the direction of municipal forces.

Through this agency we cannot fail soon to reach a condition where the people of all classes and in all parts of the city will begin to do their own thinking and to act together for the advancement of the best interests of all. It is hardly too much to

hope that these organizations, rather than the boss-guided primary, will become the source of nominations for municipal offices. When the desire for such a result is generally realized, it will be backed by such a political power as must suffice to exterminate "politics" as we now know it from the control of the business of the city.

Relief, especially in this respect, is not to be secured in a moment, but we may certainly say that the condition is most hopeful.

Not Afraid of Tammany.

The town is now filled with apprehension as to what may happen if Tammany Hall returns to power, and the fear is far too general that this would mean a return to the worst conditions of the past. I have no such apprehension. I have had occasion, during the past two or three years, to make a familiar acquaintance with many of the most active leaders of the Tammany organization, and I have made the important discovery that they are human beings; that as a rule they are actuated by the same aspirations that are felt by others. They seek success in life, and the acme of such success is to secure the approbation and the esteem of the people.

We shall always have as good a government as the people at large appreciate. These Tammany gentlemen are not hankering after public obloquy and disgrace. The voice of the people is the controlling power with them. Some of them make mistakes, and some of them do wrong, but the worst man among them will hold his hand before he will knowingly shock public opinion. They still have a greedy hankering after "patronage," and they will make mischief in satisfying it for some years yet, but this tendency will lessen as time goes on.

Public opinion is constantly growing more intelligent and more exacting, and it cannot fail to react on our rulers, of whatever party, in leading them to conform to such standards as the people may establish. In the present case the conditions seem very clear. The people have learned what good government is, and they will not give it up for long under any administration.

Long before the great city of the future shall have approached the lines laid down above, its people will be a different people from what they now are, and its rulers will be different rulers—

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THE PHILADELPHIA GAS LEASE.

BY DR. FREDERIC W. SPEIRS.

At a time when the tide of American public opinion is setting strongly toward enlarged municipal activity, Philadelphia is about to deliver to a private corporation under a thirty-year lease, the gas works which have been owned and operated by the public for more than half a century. If this were an intelligent, deliberate verdict on the experiment of public administration of a great municipal industry, it would be difficult to overrate its importance. That it is not such a verdict most students of municipal affairs clearly understand. But this action of Philadelphia is highly important, nevertheless, as a revelation of the motives and methods of private capitalists in the momentous struggle for the control of municipal franchises now being waged all over our country.

In order to interpret the motives and understand the methods, it is necessary to know something of the history of the gas franchise in Philadelphia. In establishing a gas plant for Philadelphia in 1835, Councils of that early day clearly recognized a fundamental principle of good municipal administration which modern councils frequently fail to see. The ordinance creating the Philadelphia Gas Works was framed on the principle that the supplying of gas is a public function which should be controlled by the municipality and not delegated to a private corporation. Gas lighting was in the experimental stage when the Philadelphia plant was established, and Councils did not feel warranted in assuming the financial responsibility involved in gas manufacture, but they were determined that the plant should be under public control. They therefore devised an ingenious plan for throwing the risk of the new enterprise upon private capitalists while reserving the management to the public. The ordinance of 1835 provided that the capital to build the works should be secured by an issue of stock, but the administration of the plant was placed in the hands of a board of twelve trustees elected by Councils. Thus the administrative board represented the public, not the

stockholders. Moreover, the city reserved the right to purchase the plant at any time by converting the stock into a twenty-year loan.

In 1841 the city exercised its reserved right and became the owner of the gas works. The ordinance passed provided that the trustee system as originally established should be continued until the loans created on the gas works account were extinguished. Thus there came into existence a most remarkable administrative body, the notorious Philadelphia Gas Trust. It was soon discovered that this board of trustees with an assured lease of life during the term of the loans had been unwittingly invested with autocratic power. Councils elected each year one-third of the body of twelve trustees, but had no control over this board which annually spent between three and four million dollars of the public money, other than the indirect influence exerted through this election. The unique opportunities for spoliation offered by this irresponsible administrative board were speedily recognized, and during the Civil War period a body of political bandits succeeded in capturing the Trust. From this vantage ground they proceeded to corrupt the whole municipal administration, and the Philadelphia Gas Ring speedily created a political machine which rivalled that of its contemporary—the Tweed Ring—in the neatness and dispatch with which it transferred the money of the people from the public treasury to the pockets of the politicians.

The chains which Philadelphia had forged for herself were secured by a time lock set for 1886—the year of the expiration of the last loan under the ordinance of 1841—and meantime the city writhed in vain in the galling embrace of the Gas Trust fetters. Thus, although Philadelphia owned her gas works from 1841, during a period of forty-five years she was denied the opportunity of administering them through responsible public officials. We cannot wonder that the gas works were badly managed under the trust system. We are only surprised that the results were so good. For in spite of the fact that the Gas Trust was the nucleus of one of the most corrupt political organizations of modern times, the price of gas during almost the entire period of its administration was lower in Philadelphia than in any other large city in the country.

The Gas Trust was doomed by the extinction of the loans, but Philadelphia was not destined to enjoy responsible public ad-

ministration without a struggle. For as the Trust neared dissolution, private capitalists began a systematic campaign for the capture of the works, which lasted fourteen years and culminated last month in the triumph of private interests. The campaign began in 1883 with an offer of ten million dollars for the plant and an exclusive franchise. This and later offers of larger amounts were refused.

Finding that the city was not inclined to sell the plant, the capitalists changed tactics and proposed to lease it. In September, 1886, a most determined effort to secure a lease of the works was made by a sydicate headed by Mr. Thomas Dolan, the clever strategist, who after eleven years has at last triumphed in the lease just executed.

The Dolan syndicate presented to Councils in 1886 a proposition to lease the gas works for twenty-five years, offering an annual cash rental of one million dollars and agreeing to spend three million dollars within five years in extending and improving the plant. The price of gas to the consumer was to be fixed at $1.50 per thousand feet, and public lighting was to be done at cost. As soon as the Dolan proposition was made public, several others were at once submitted, all offering better terms. But these were brushed aside with little consideration, and Councils in open defiance of public sentiment hurried the Dolan lease toward execution. But their shameless eagerness to betray the public interest for considerations best known to themselves evoked such a burst of public indignation that they were awed into a semblance of deliberation. At this juncture Mr. John Wanamaker came to the rescue with a proposition so much more advantageous to the city than that of the Dolan syndicate that Councils dared not ignore it. But while offering liberal terms he advised the city not to lease on any consideration. His action in connection with an offer of Mr. Frank McLaughlin to lease the works and lower the price of gas to seventy-five cents per thousand feet made the Dolan proposition ridiculous, and the whole matter was quietly allowed to drop.

The Bureau of Gas under the Department of Public Works took the plant out of the hands of the Gas Trust in March, 1887, and began to repair the worst evils of trust management. The quality of the gas was improved and the cost of manufacture decreased. In 1894 the price of gas was reduced from $1.50 to

$1.00 per thousand feet. In spite of many defects the public administration of the gas works became popular, and the politicians hastened to affirm their faith in municipal ownership and operation. When in April, 1894, it was rumored that the Bay State Gas Company had quietly laid plans to capture the works and had "fixed Councils" for that purpose, the press thundered so fiercely and unanimously against the threatened seizure that the meney withdrew from ambuscade without firing a shot.

Meantime in 1888 the city had entered into contract with the United Gas Improvement Company for a supply of water gas to supplement the coal gas made by the city. Beginning with a modest contribution to the city supply, this company has increased its output year by year until in 1896 it supplied 1,916,396,000 cubic feet out of a total of 4,913,461,000 cubic feet consumed. Many shrewd observers recalled the old tale of the horse who humbly begged to put his head inside the door of a warm room on a cold night and then gradually insinuated his body until he was wholly inside and the owner of the small house was crowded out into the cold. However, the present administration began in 1895 with an assertion by Mayor Warwick in his inaugural address that the "gas works should never pass from the absolute control and ownership of the city." This opinion was reiterated as late as April, 1897. The conduct of the gas works had aroused much criticism, but the Mayor valiantly defended his administration with the claim that the unsatisfactory service was due simply to the failure of Councils to provide a comparatively small sum of money for modern appliances, and extension and enlargement of mains. There was no public discussion of a lease. Intelligent people knew that the works were not run on strict business principles, but they apparently approved the principle of municipal management, believing that the abuses could be remedied without changing the system.

So matters stood when on September 2, 1897, Mayor Warwick sent to Councils a proposition for a thirty-year lease of the gas works by the United Gas Improvement Company, of which Mr. Thomas Dolan is president. The Mayor later informed Councils that he had been considering the lease for two months, but in transmitting it he made no comment except that the proposal was worthy of serious consideration. In a few days it became evident that the leading papers would either champion the lease or remain

silent. The friends of municipal administration grasped the situation instantly. The United Gas Improvement Company was well known in Philadelphia, and the powerful political interests behind it were clearly understood. The most prominent stockholders of the Company are the gentlemen who control the street railways and the electric lighting plants of the city, and their skill in the peculiar argumentation which captures a majority in Councils had been often proved in the past.

As in 1886, the lease proposition was speedily followed by several others. All of these were apparently more advantageous to the city than that of the United Gas Improvement Company. But their fate was clearly foretold in a letter written by Mr. Henry C. Lea in response to a request from the Citizens' Municipal Association that he express his opinion on the various lease propositions. Mr. Lea says, "In considering the question it would appear superfluous to discuss any proposition save that of the United Gas Improvement Company, for the influence in Councils of the gentlemen concerned in that corporation has been too often manifested for us to suppose that rival offers will be successful."

A comparison of the terms of the lease of 1897 with the favored lease proposition of 1886 shows that either the works have increased amazingly in value in eleven years or that public appreciation of their value has developed wonderfully. In 1886 the people narrowly escaped an obligation to pay $1.50 per thousand feet until 1911 in return for an annual rental of $1,000,000 and an expenditure of $3,000,000 in improvements. The offer of 1897 is more liberal. The United Gas Improvement Company's proposition as originally submitted and finally approved provides for a lease of the gas works for a term of thirty years at an annual cash rental which Mr. Dolan estimates will amount to $36,725,000 during the thirty year term, if the price of gas should in the meantime be held at the present price of one dollar per thousand feet. Furthermore, gas is to be supplied free for lighting all public buildings. The existing street lamps are also to be supplied free of cost and an annual addition of three hundred free lamps allowed during the entire term of the lease, and these lamps are to be lighted, extinguished, cleaned and repaired by the Company at its own expense. The Company guarantees an expenditure of $15,000,000

in "alteration, improvement, extension and betterment of the manufacturing and distributing systems" during the thirty years, five millions of which is to be expended within three years from the date of delivery of the works.

It is further provided in the lease that Councils may choose between a policy of revenue to the city and reduction of price to the consumer. By waiving the cash rental the price of gas may be reduced by Councils on the following schedule: From the present time to January 1, 1908, ninety cents; during the next period of five years, eighty-five cents; during the succeeding period of five years, eighty cents; and during the last ten years of the lease from January 1, 1918, to January 1, 1928, seventy-five cents. If Councils decide to hold the price above these minimum figures for the respective periods, the city will receive as cash rental during each period the difference between the minimum rate for that time and the rate which Councils may fix. For instance, if during the period from January 1, 1913, to January 1, 1918, when the minimum rate is eighty cents, Councils should fix the rate for the consumer at ninety cents, the city will then receive ten cents on each thousand feet of gas sold to private consumers.

Moreover, the lease provides that the city may terminate the contract on January 1, 1908, by giving notice of such intention on or before July 1, 1907, and reimbursing the United Gas Improvement Company for the amount meantime expended in improving and extending the works with six per cent. interest on the money thus invested by the company during the ten years. If the city does not act in 1907, however, it has no further opportunity to terminate the contract before 1928.

The various lease propositions submitted to Councils were at once referred to the Joint Committee on Finance and Gas. A sub-committee was created under the chairmanship of Select Councilman Henry Clay, who had been most prominent in the attempt to stifle discussion and hasten action on the Dolan lease of 1886. Public hearings were accorded by the committee and the various views of the leases were quite fully presented.

Public interest in the question was intense, and as soon as the issues were made clear, discussion waxed warm.

The lease proposition was favored by certain influential

business men out of Councils and, at the outset, by a considerable proportion of the citizens in general, because it promised better and cheaper gas in the immediate future. The gas supply in certain sections of Philadelphia has been exceedingly bad. The administration has admitted this, but until the lease was broached the director of public works claimed that a comparatively small sum for improvement and extensions would give an adequate supply of gas of good quality. During the lease agitation, for reasons never satisfactorily explained, his estimate of the sum needed to put the works in condition to render good service increased amazingly. However, the poor gas was a present affliction, and the lease, with its large expenditure for improvement, promised speedly relief.

Then the immediate financial returns promised by the would-be lessees dazzled many. President Dolan said: "We offer to convert the present annual loss of over $400,000 into an average annual profit of $1,224,166." The last annual report of the director of public works claimed a net profit of $352,988, while if the amount of free gas supplied to the city were credited to the bureau at one dollar per thousand feet the profit would have been increased $674,031. But by ingenious methods of bookkeeping Mr. Dolan managed, in a public statement, to convert this profit into an "average loss" for three years of over $400,000. His peculiar methods of statistical argumentation are fully analyzed in the following article by Colonel John I. Rogers, where he shows that a complete and accurate balance sheet of the gas bureau for 1896, crediting the gas supplied to the city at its cost of production, would exhibit a net profit of $598,887, while he figures that with a modern plant and proper distribution, an efficient management would have cleared more than $2,360,000 on the consumption of last year at the present price.

Meantime those who were far-sighted and clear-headed began to assert themselves in opposition to the lease. They were not content to accept the better and cheaper gas in the immediate future under conditions which bound them for a generation to prices the lowest of which was nearly fifty per cent. above those now paid in certain European cities. It was soon recognized that there was really only one lease proposition that was likely to be approved by Councils, and it was not difficult to find facts to prove that the United Gas Improvement Company or its

assigns were destined to wax exceedingly prosperous if the lease went through. It was generally known that several cities in Great Britain are even now supplying gas of twenty-four candle power at a profit of from fifty-two to fifty-four cents per thousand feet. Official figures were at hand to show that Belfast makes gas for about nineteen and one-half cents per thousand feet. The people were reminded by a local gas expert that a responsible company guaranteed to make gas and put it in the holders at twenty-five cents per thousand. These and a multitude of similar facts impressed intelligent and disinterested citizens, but most of the councilmen were apparently beyond the reach of argument. So far as the advocates of the lease in Councils were honest, they could not or did not see beyond the apparent financial advantages of the moment, the larger possibilities of public loss in the future.

The opponents of the lease met its advocates squarely on the ground of financial advantage, and showed that the city was about to make a bad bargain, but they also urged other objections. They pointed out that the creation of a great private monopoly in gas supply was bad municipal policy on account of the danger of political corruption. Admitting the present evils of political management of the works, they maintained that the principle of public management is correct and that it may be be purged of existing abuses. During the discussion it became evident that the arguments for the extension of municipal activity in the industrial field, drawn chiefly from successful European experiments, have deeply impressed the business men as well as the wage earners of the community.

The friends of the lease in Councils laid much stress upon the clause which permits the city to withdraw from the contract in 1908, but the opponents replied that the clause had been so framed that the chances of withdrawing from the arrangement were extremely small. The withdrawal must come in precisely ten years, and the Company must then be reimbursed for all its expenditures for improvements and extensions. Almost the entire amount invested will doubtless be expended during this term of ten years, and it will be a severe financial strain for the city to raise the money to repay the investment, while, unless conditions change greatly, the potent political influence of the Company will make it almost impossible to obtain a vote in Councils in favor of withdrawal. Only the grossest abuses which would provoke a veri-

table revolution would be likely to disturb the established order. Therefore the possibility of escape from onerous conditions in ten years has not entered largely into the discussions of the lease.

Thus, although certain prominent business men and the most influential papers supported the United Gas Improvement Company's proposition, from the outset the larger number of intelligent and disinterested citizens opposed it most vigorously. The Municipal League and the Citizens Municipal Association led the opposition. The League was especially active. Its members were early convinced through expert testimony that the compensation offered was wholly inadequate, and they furthermore objected to a lease on any terms for so long a time. The League, therefore, began a campaign of education by issuing a circular setting forth most cogent arguments against the proposed lease. Opinions adverse to the leasing policy were secured from experts and published in the daily papers. Wide circulation was given to a most able and convincing criticism of the United Gas Improvement Company's lease by Dr. L. S. Rowe, of the University of Pennsylvania.

Perhaps the pamphlet of greatest influence upon the general public was an answer to an original and surprisingly useful argument of the supporters of the United Gas Improvement Company that the city should accept the proposition of this Company on account of the eminent respectability of the managers, most of whom are Philadelphians of high business standing. The use of this argument was rendered more remarkable by the generally understood fact that the lease, if obtained, was to be assigned to a company which existed only on paper. Mr. Finley Acker, a prominent member of the Municipal League, used the argument as the text for a most trenchant statement of the financial consequences of the lease, entitling his pamphlet, "Eminent Respectability—the latest public foe, under whose guise it is proposed, during the next thirty years, to tax every manufacturer, every merchant, every clerk, every artisan, every laborer and every householder in Philadelphia, by charging *double or treble price for gas*, to enable a wealthy syndicate to reap fabulous profits through their autocratic control of the gas monopoly of Philadelphia." Meantime the League had enlisted the co-operation of a large number of trade, labor and social organizations, and resolutions of protest poured into Councils from every quarter of the city.

Public sentiment against the lease grew in extent and inten-

sity day by day as it became more and more apparent that Councils were not amenable to public opinion in this matter. This sentiment reached its highest expression in a great "town meeting" which was held in the Academy of Music on October 15. The principal speakers were ex-Minister William Potter, ex-Ambassador Wayne MacVeagh, and ex-Mayor Stuart, the immediate predecessor of Mayor Warwick. The proposed lease was condemned in most unqualified fashion, and in discussing the motive for favorable action by Councils Mr. MacVeagh used this plain language: "Any Councilman who refuses to take the voice of the people on this question, and thus delivers their property over, will wear to his dying day this legend graven on his forehead, 'This man was bribed by the rich to rob the poor.'"

Meantime an attempt had been made to induce Councils to provide for a popular vote upon the question of the lease, but the resolution proposing this was voted down. The opponents of the lease soon recognizing that there was scant hope of defeating it, devoted their attention to forcing amendments to the favored proposition which would safeguard the city's interest as far as possible. Several important concessions were thus obtained.

On October 20, the joint committee favorably reported the United Gas Improvement Company ordinance. A minority report from the committee called the attention of Councils to the fact that two other responsible companies had agreed to accept all the obligations of the ordinance favorably reported by the committee and pay a premium of ten million dollars for the lease. For this and other excellent reasons the minority urged that the ordinance submitted by the majority be defeated. But in accordance with general expectation the United Gas Improvement Company's ordinance was passed by Common Council on November 8, under whip and spur, by a vote of seventy-eight to fifty-two. It is a curious commentary on the elaborate farce of choosing municipal legislators on national party issues, which is annually played in Philadelphia as elsewhere, that the large Republican majority was led in this important matter by one of the least intelligent of the Democrats in the body, the Republicans following this leadership, as the *Ledger* says, "with a childlike simplicity and faith that under some circumstances would be touching to see." The lease passed Select Council on the following day, November 9, by a vote of twenty-five to thirteen.

The ordinance was now in the hands of the Mayor, and the Municipal League requested a public hearing before action. The Mayor did not reply to the request. A second petition for a hearing was likewise tacitly refused. Denied a hearing in this unprecedented fashion, the League addressed to the Mayor a letter of protest reminding him that "the audacity of these gentlemen (Mr. Dolan and his co-adjutors) in expecting you to admit that you are incompetent to perform the duties for which you were elected, could hardly have been greater if they had been capable of imagining that you were a man whose honor and self respect could be bought and sold in a public market. The consummation of the proposed lease would be a confession to all the world that the government of the city which you have so often and so eloquently praised is so lacking in honesty or intelligence that it cannot manage its own gas supply." But three days after the passage of the ordinance by Select Council, the Mayor made the confession of incompetency by signing the lease. Several applications for injunction to prevent the execution of the lease were at once filed. Preliminary injunction was refused by the Court of Common Pleas on November 30, and on that day the United Gas Improvement Company took possession of the gas works. Appeal to the Supreme Court is suggested and another injunction action is pending as this is written.

Thus has the public gas plant of Philadelphia been handed over to a private corporation for a generation, unless the courts intervene. There can be no doubt that at the present moment a very large proportion of the citizens are convinced that they have been betrayed and robbed by their representatives. There is deep indignation at the methods employed to force the lease in defiance of public opinion. Civic pride has been stung into consciousness, and political death is freely decreed against those who voted for the lease. But Councils can throw a sop to Cerberus by immediately reducing the price of gas from one dollar to ninety cents. Ninety-cent gas will doubtless prove a powerful soporific to the awakened public conscience. The present good will outweigh the future evil. The burden of the lease will not be felt by the individual citizen until improvements in methods of production have greatly reduced the price of gas in those cities which have not foresworn the benefits of modern progress, and the awakening

to the real nature of the bargain just made may thus be long deferred.

Doubtless the lease of the Philadelphia gas works, after fifty six years of public ownership and public administration, direct and indirect, will be widely quoted as evidence of the fallacy of the principle of municipal management of the gas industry. But the foregoing recital should make it clear that the lease proves nothing but the power of aggregated capital in politics. And we needed no new demonstration of this.

MUNICIPAL GAS IN PHILADELPHIA.*

By Col. John I. Rogers.

President Thomas Dolan, of the United Gas Improvement Co., in an address "to the citizens of Philadelphia," tells them that their gas business was run at a "cash loss of $416,320.22 per annum" during the years 1894, 1895 and 1896. It will be observed he uses the words "*cash* loss," for the obvious reason that the expert accountants, whose report he submits, can only arrive at such average "*cash* loss" by adding for the three years mentioned an aggregate paid for "*extensions and improvements*" of $1,235,208.23. By considering this large sum for betterments and permanents as a *cash* outlay, chargeable to the three years' business, and by sandwiching the lesser reported profits of 1894 and 1895 around the greater reported profits of 1896, and charging them against four new items of disbursements, never heretofore brought into bookkeeping in the Bureau of Gas, and by omitting all credits for free gas for street lamps, he manages to turn an actual profit for the three years, and a substantial profit for 1896, into an average loss of over $400,000 per year.

Let us consider the four new items of disbursements, that the expert accountants have delved for and discovered outside the reports of the Bureau of Gas. It appears that the bookkeeping of this Bureau has not been, according to the accountants, correct or reliable. The Bureau has failed to charge against its

[*Note.—During the controversy over the leasing of the Philadelphia Gas Works, as described by Dr. Speirs in the foregoing article, President Dolan of the U. G. I. Co. published a statement in all the newspapers setting forth that the works had been run at a loss during the years 1894, 1895 and 1896, and quoted from the report of a firm of public accountants to substantiate his position. In response to a request from the Municipal League, through its counsel, Clinton Rogers Woodruff, Colonel John I. Rogers, himself the president of a large gas company, took up this statement and analyzed it in the light of the actual figures and transactions. This article contains the substance of Colonel Rogers' careful and complete study of Mr. Dolan's claim, and constitutes a valuable contribution to the discussion as to whether Philadelphia's gas experiment had been a failure or not.

Colonel Rogers, as president, made an offer relative to the city's gas works which was much more favorable to the city than the one actually accepted. The terms of his offer also appear in this article, and especially in Exhibit A.—Editor.]

profits the amount expended to keep the books and collect the gas bills, the cost of which has been charged to the receiver of taxes, and has averaged about $73,000 annually. The city controller audits these accounts and charges for it $6,000 per year. The bureau of lighting cleans and repairs, lights and extinguishes the street lamps at a cost of over $189,000 per year, and the city pays for rentals of gas offices something over $12,000 per year without any credit therefor by the Gas Bureau. I do not know why those four items were thus ignored in the accounts of the Bureau of Gas, and therefore cannot criticise their omission. Perhaps some explanation can be found in the recent remarks of Director Thompson to Councils, in which he is reported to have said "the city extends mains whether it is profitable to the Bureau or not. While this does not pay the Bureau of Gas *it helps the tax office.*" I understand this to mean that the city considers it to be a municipal duty to encourage building by extending the advantages of the use of gas, irrespective of profit or loss, because of the increased revenue in taxes that is sure to follow. It is a fair presumption that building improvements would not be made as extensively and rapidly as heretofore, if the city refused to extend its mains and services except at a profit. Therefore some credit should be given the Bureau of Gas for increased tax receipts that inevitably follow such municipal paternalism. No bookkeeping will show what that credit should be, but it can scarcely be denied that it would be largely in excess of $79,000 charged by the receiver of taxes and controller for bookkeeping, collecting and auditing.

As for the other two items, lighting and rentals, I can vouchsafe no explanation for their omission from the books of the Bureau. It would seem that President Dolan is justified as to them, unless some explanation can be vouchsafed similar to what I have imagined, as to the increased tax receipts.

But let us, for argument sake, concede that so far as the cash accounts are concerned the accountants are correct. In order to arrive at the actual profits irrespective of cash receipts, which is the only way anyone does in his private business, there should be added the free lighting of the public lamps either at its retail price per 1,000 feet or at its cost to the city. This the expert accountants have failed to do, but they have gone a step further, and in their Statement D have added to the net losses for three

years	$13,872 43
the cost of the extensions and improvements recited in Statement B	1,235,208 23
making an alleged loss for the three years of	$1,249,080 66
or an annual average of	416,360 22

It is to be noted that the accountants, fearful, perhaps, of criticism on their manner of calculating "profits," wind up their report with a distinct notice that Statement A is only a "cash account," with the new items of disbursements deducted, and that Statement D adds the extensions and improvements, "which must have been provided for otherwise than out of the sales of gas." In other words, they do not say over their signatures, as expert accountants, that their results are *losses*, but that they have added those outside appropriations for betterments to the "net losses" for said three years.

But President Dolan goes a step further than the experts and actually misquotes them when he says, "$416,360, the actual annual *loss per public accountants' statement.*" Yet the "public accountants" do *not* so state, as already shown. They call the average annual loss for the three years $4,624.14 and only say they have added "the cost of extensions and improvements," but do not certify or classify the latter as losses. They know better than so to state over their signatures. What merchant or manufacturer would charge up against current business an extension to his store or mill? If any bookkeeper of President Dolan or Mr. Dolan himself were so to make up his balance sheet his position would become precarious. Extensions and improvements always appear as disbursements in cash accounts, but their valuations, with a yearly percentage of deduction for wear and tear, are invariably included as assets in the profit and loss account, and the comparative tables which President Dolan submits to the public, showing the losses to the city under its own management as against the gains for the city under his management, are, therefore, basically wrong when they start with "$416,360 annual loss per public accountants' statement," and then multiply the same by thirty, so as to make such alleged loss assume an immense aggregate for the purpose of invidious comparison.

The marshalling of figures by President Dolan is more ingenious than ingenuous, and is founded on the absurd basis of a

three-years calculation. Why is this necessary? The statistics of the Gas Bureau show that the consumption of gas increases each year in geometrical progression, while population merely increases in arithmetical progression. Why then take 1895 and 1894 into our calculation unless, as already intimated, they were intended to offset and reduce the better report of 1896. If the business was not very progressive and not constantly increasing by immense strides there would be no objection to taking three or more years in order to obtain an average, but where the demand increases each year in much greater proportion than should the expenses, then, if we are going to calculate for so long a period into the future as thirty years, we should at least start with the last completed year as our basis. A fair calculation would estimate an increase in the demand for the next thirty years, predicated on the increase during the past thirty years.

I have appended to this paper four tables of calculation of profits, three being based on the figures for 1896 exclusively. By examining Table I (annexed) it will be observed that after a deduction from the profits as per the report of the Bureau, $352,988 00
of the said items of bookkeeping, auditing, lighting and rentals.....281,569 00

leaving.....$71,419 00

I have added the gas furnished gratis to the city worth to consumers $1 per M, $674,031. But, as it is contended, that only the cost of this gas should be added, I assume Councilman Brown's very careful estimate of eighty cents per M to be correct, and accordingly have only added.....$539,224 00

making.....$610,643 00
From this, water rent, as per estimate of the director of public works, should be deducted..... 11,756 00

making the actual cash profits for the year 1896 to be..$598,887 00

It will be noticed by reference to Table I that if we could have used 1897 instead of 1896 as our basis of calculation more than $100,000 could properly be added because of the lower price for which the city has purchased its coal for the current year.

It will be observed that as the lease to the U. G. I. Company is silent as to the payment of taxes, and as the city does not pay any on its own property, I have omitted all reference thereto in imitation of President Dolan, the object of this table being to show by comparison of items why it would pay the city to hold its own gas works irrespective of the sum spent for betterments or improvements. On that latter point more anon.

Therefore, instead of President Dolan starting his comparative tables by multiplying our alleged annual loss, based on an average of three years' cash disbursements (which included betterments), by thirty, thus making a total loss of $12,490,800 for thirty years, he should make the following corrections in substitution therefor:

Annual profit (if not increased over that of 1896), exclusive of permanents, according to Table I, making coal gas and buying water gas, as in 1896, $598,887, multiplied by thirty, equals for thirty years	$17,966,610 00
Table II, making or purchasing water gas at 37 cents, $1,208,950, multiplied by thirty, equals	36,268,500 00
Table III, making a superior gas at 25 cents and a partial reduction of distribution expenses, $2,361,095, multiplied by thirty, equals.....	70,832,850 00

Now let us deduct the cost of the permanent improvements or betterments necessary to put the city plant in first-class order, which means new mains, new modern generators, improved water gas plants, with a capacity of, say, 30,000,000 feet per day, and services, as suggested by Director Thompson. They can all be furnished at a most liberal calculation for $5,000,000. There are very many large corporations and builders of gas plants that will guarantee for $5,000,000 to do what I have suggested. Mr. Addicks has already stated that he would do it for much less. But if I am mistaken as to the cost of the mains and services, we can allow nearly $3,000,000 more, calling it the odd $7,966,610. If we deduct it from my estimate of thirty years' profits, we would still have $10,000,000 in profits according to Table I, over $28,000,000 according to Table II, and nearly $63,000,000 according to Table III, to set over against the supposed financial benefits of the U. G. I. Co. lease. Remember these calculations are based upon the

supposition that the output for 1896 would not increase a single cubic foot thereafter. How manifestly unfair to the city such a hypothesis becomes when one contemplates the tremendous growth of the gas business during the last thirty years! In that period of time the amount of gas manufactured has increased from 981,642,000 cubic feet in 1867 to 4,913,461,000 in 1896, an increase of 400%. During the last twelve years it has increased from 2,757 millions to 4,913 millions, the increase in 1896 over 1895 being almost 500 millions.

Is it only fair to presume that a still greater ratio of increase will be manifested in the future, especially since the extension of the use of gas for fuel is growing so marvellously, and will be augmented by each reduction in its price? But *if* we leave out every element of increase caused by such reduction and merely calculate on a continuance of the past geometrical increase of consumption, because of the arithmetical increase of population, we can multiply our present output by five and ascertain what it will be in 1927. The answer is nearly 25,000,000,000 cubic feet.

I have not time to make an estimate for each of the thirty succeeding years, showing the annual increase over the present output up to that of 1927, but in Table IV (annexed) I have struck an average based on half those 25 billions with a calculation of cost of making and distributing that certainly is conservative. In that Table (as also in Table III) I have estimated that the generating and purifying of the gas will not cost over 25 cents per M. It is too late for any one to question the practicability of doing so, when a *bona fide* proposition to prove it without cost or risk to the city is still open and unaccepted. I append as an exhibit, a synopsis of that proposition. (1)

The other side of President Dolan's account is also subject to still severer criticism. He says the lease will insure "22 candle power definitely fixed at all times" as against "an unknown and varying quantity" furnished by the city. He puts to the credit of the city profits calculated by him at $36,725,000

(1) The distribution of the gas, collecting, lamplighting and all other expenses after the plant is improved should not exceed 10 cents per M, and I have accordingly, in Table IV, so estimated the cost of distribution, and deducted it and the cost of generating from the sales of 12,500,000,000 cubic feet at $1.00, 75 cents and 50 cents per M, showing immense profits, which in my humble opinion are not only possibilities but probabilities that are as near certain as anything uncertain can be.

during the lease. President Dolan cannot deny that *if* at the first meeting of Councils succeeding the execution of the lease, an ordinance should be passed reducing the price of gas to 90 cents and subsequently, at the prescribed periods, to 85, 80 and 75 cents, that the city would receive nothing instead of those immense profits. Now while it is not probable that the people could compel their representatives *immediately* so to reduce the price, yet I doubt if there is one citizen of Philadelphia cognizant of public affairs, or who has taken any interest whatever in the nomination and election of public officials, who will not express his honest opinion that the first year would not elapse, before Councils would be *compelled* to reduce the price of gas to the minimum price for the periods prescribed in the lease. I would like to hear President Dolan or any other man successfully controvert this assertion, and if he cannot, what becomes of the immense item of $36,725,000 as the city's revenue for the 30 years of the lease?

He claims that working capital to the extent of a million dollars would be released. This means that the company is to take the coal, oil and gas on hand on the day the lease goes into operation. This is estimated to be worth $1,000,000, and the city will have that cash balance to do as they please with. This is certainly a new method of calculating profits. The gas would certainly be sold for cash, and the coal and oil are there to be turned into gas, and how that can be included among profits, especially as an equivalent sum would have to be refunded at the end of the lease, or as much of it as would then be "stock on hand," is difficult to comprehend. One neutralizes the other and it is unfair therefore to include it among the profits or advantages of the lease even under the alluring heading of "Working capital released."

The same may be said of the release of the Ninth Ward works, also estimated at $1,000,000. The answer to this is that the city now owns that property and nothing that the U. G. I. Co. can do will add one penny to its value. The city by the introduction of modern water gas plants can dispense entirely with its Ninth Ward works within twelve months. It is certainly a most laughable exhibition of generosity on the part of this company to make the city a present of its own property.

As to the free gas for public buildings and street lamps, that should be an offset against the profits, because I have included

that item in my calculation of profits. The increase in the number of those lamps each year would be the same under either management, but the cost of such increase will not begin to compare with the advantages of the growth of the business. I do not see, however, the pertinency of the item of "Lighting, extinguishing, &c., six million dollars," as I have in my calculation charged the city with the rate of $189,953 per year, as per the bookkeeping of the public accounting, which would amount in thirty years to $5,698,590. The other $300,000 he can offset against increased business over 1896.

As to the expenditure for improvement and extensions, fifteen million dollars, it is not possible to judiciously use that sum, unless, as Mr. Addicks says, we should "gold plate the works." Five to eight millions would certainly cover everything, and if more were spent it would probably be in the first fifteen or twenty years, as it is not according to human nature for a tenant, during the latter part of his lease, to make any unnecessary improvements that will inure to the benefit of some one besides himself.

President Dolan supplements his arithmetic with some remarks addressed; "To the citizens of Philadelphia," which are worthy of consideration. He says that as it is impossible to increase the selling price of gas, the only other way of stopping the city's "losses" is to reduce its cost, for which he suggests three methods: 1. Cutting down wages. 2. Cutting down the cost of raw material. 3. Making radical and judicious improvements of the plant.

As to the first, he says it is impossible to reduce wages, and makes the assertion that the men employed at the Philadelphia Gas Works are "not paid as high a rate of wages" as his company pays at its various works. It is very hard to understand what he means by this "*rate* of wages." Perhaps he arrives at the "*rate*" by including the salaries paid to engineers and skilled workmen, or perhaps as water gas plants require so many less laborers, they can afford to pay them a somewhat higher "rate of wages" than could possibly be paid under business rules in a coal gas plant. Whether this is so or not, it is certain that Director Thompson has said that there were 1,700 laborers employed at the Philadelphia Gas Works whom he is compelled to pay one dollar and seventy-five cents for work that a private

individual could get for one dollar and twenty-five cents, and that this loss of fifty cents on 1,700 men is equal to $850 per day, or about $300,000 a year. Another notorious fact is that if a water gas plant were substituted for the coal-gas retorts, 450 men could do the work that the 1,700 laborers now do. Mr. Addicks, President of the Bay State Gas Co., stated that 300 men made all the gas used for the city of Boston, which is more than half the supply of Philadelphia. He says 450 men could make all the gas needed for this city. Certainly it would be bad business policy to employ more than what was necessary merely out of political charity. I do not think that such a well conducted company as is the U. G. I. Co. would tolerate for a moment the employment of 1,700 men to do the work of 500, or the payment to those men of fifty cents per day more than what equally good men could be secured for the same work. President Dolan does not say that he would positively employ those men. Here is what he says: "Every *capable* man there, employed under municipal management, will find work at equally remunerative wages *under private management*, and many additional men will be employed on the mains and extensions of the works," etc. You will notice the words "every *capable* man," and also notice the words, "will find work *under private management*." *Whose* private management? He does not bind his company by this glittering generality. He is too able a man and official to make such a binding promise. As to the additional men employed on the improvements of the works, they are mostly skilled mechanics and will most likely be employed under contract, or under the same supervision by the leasing company that contractors usually employ in private works.

President Dolan's second method of reducing the cost of gas is by cutting down the cost of raw materials, and here he properly condemns the practice, now in vogue, as to bids by public advertisements which permit collusion. He says this can only be corrected by changing the city's charter. That is one remedy certainly; but is it the only one? A few weeks ago there appeared in the public prints the complaint of W. T. Rainey & Company, who had bid to supply 100,000 tons West Virginia gas coal for 1897 at the rate of $2.95 per ton. This was the lowest bid, yet the contract was awarded to others at rates from $3.11 to $3.14 per ton. When the bids were opened, and before the awards

were made, Rainey & Co., naturally expecting to be awarded the contract for at least 100,000 tons, were told that if a sample of the coal was tested satisfactorily, the firm would be awarded the contract. Chief Park of the Bureau directed the firm to send two car loads to the Ninth Ward works for testing purposes, with accompanying bills of lading showing that the coal came from the mines mentioned. Rainey & Co. naturally demanded that their representative experts be present at the test of the coal, to which Director Thompson assented, but Chief Park (according to Rainey & Co.) refused to permit such experts to be present, and delayed and thus confused matters in the usual style known to politicians. Finally, Rainey & Co. became disgusted and refused to permit a test in the absence of their experts, because such a star-chamber test might have condemned their coal not only in Philadelphia, but elsewhere where they are now selling it for gas purposes and giving the highest satisfaction. The city, therefore, pays from $3.11 to $3.14 for what was offered for $2.95. Rainey & Co. had only bid for a portion of the coal needed for the city, and publicly declared that they would give $100,000 for the privilege of supplying all the coal for 1897 at the rate of $3.11 per ton. This serious charge of unfair dealing appeared in the public newspapers without any reply or denial by Chief Park. Rainey & Co. say they are still prepared to substantiate their charges. It therefore seems that there would have been $100,000 to the credit of the Bureau of Gas for 1897 more than will be, if all the coal had been bought at Rainey & Company's figures.

President Dolan's third method of reducing the cost of gas is by improving the plant. This can only be done, President Dolan says, by borrowing money on the credit of the city, and he condemns that course as unjust to those taxpayers who may happen to be non-consumers. This delicate consideration of the rights of those few taxpayers is very pathetic. He should also object to the school tax, because many taxpayers are childless, and many others send their children to private schools, and should therefore not be compelled to support the public schools. This would be both consistent and logical, yet I do not think President Dolan will advance such a sentimental argument. He says "the spasmodic and intermittent character of work" done under annual appropriations does not add to the capacity of the plant, and that $7,000,000 have been expended in the last ten years without

attaining the end sought. Well, what assurance have we that the $15,000,000 that are promised to be spent in thirty years will be worth more to the city at the end of that time than the $7,000,000 which have been actually spent during the last ten years are said to be worth at the present time. Yet I do not think the Bureau will need to borrow any money in addition to the $1,000,000 for improving the gas works now included in the general loan which was approved by the people at the past election; with that amount secured, everything that is necessary to be done for the next year (1898) can be accomplished.

The statements of profits that I have appended show the business possibilities sure to follow the city's retention of control of its gas monopoly. The mayor and director have repeatedly certified, and committees of Councils upon their recent visits to the works have admitted, that the city's coal gas works are in good shape, needing only modern appliances to make them equal to the best. It will not be necessary, therefore, to destroy this valuable plant, even if partially superseded as processes may be invented to cheapen the cost of making coal gas. In fact, Mr. Eugene Vanderpool and other experts say that a modernized coal gas plant can generate gas as cheaply as the ordinary water gas plant. In some localities where bituminous coal is cheaper and anthracite coal and coke (such as is used in ordinary water gas generators) are dearer, and where the market price of hydrocarbon oils is subject to speculative rises, a modernized coal gas plant might, in time, become the most economical, though I scarcely think it could happen in this locality. Whether it could or could not, it is certain that a modern water gas plant using bituminous coal for its generating base, such as has recently been offered to Philadelphia for $150,000, with the guarantee already referred to (cf. Exhibit annexed), will manufacture a first class coal and water gas cheaper than the very ordinary water gas plant at the Twenty-fifth Ward works, and very much cheaper than the coal gas retorts belonging to the city, even if modernized as they should be. After the first year's test, said modern water gas plant, if successful, as it certainly would be, should be extended to a capacity of 20,000,000 feet per day. This could be done at a cost of less than $1,000,000, and to a capacity of 30,000,000 for half that much additional. Either would render unnecessary the continuation of the contract with the Philadelphia Gas Im-

provement Company or the operation of the city's coal gas plant, which, however, could be maintained as an auxiliary in case of a breakdown. The saving of labor, both in regard to the number employed and amount of wages by that time (1899), would be at least 75 per cent. as compared with 1896 or 1897.

Exhibit A.

COST OF GENERATING GAS WITH MODERN GENERATING MACHINES.

Doubts have been expressed by some not familiar with the subject, and others who ought to be have pretended to express doubt as to the ability of the Company of which I am President, to fulfill its pledge to build a modern generating apparatus that will put gas into the holders at a temperature of 70 degrees, at a cost not exceeding 25 cents per thousand cubic feet. Now, the terms of our offer made the success of our guarantee, after a 30 days test, a prerequisite to any compensation at all for our apparatus. It would therefore seem to be useless, to worry over the chances of our success or failure. But to satisfy the doubts of those who are really afraid we would waste our labor and capital in a vain attempt to do the impossible, permit me to say that we knew the risk we ran—if any—when we made the proposition. We really believe we can put it in the holders for about 20 cents, but we prefer to have a margin of safety, to allow for vacillation in prices of material and labor and incidental expenses connected with the work. Our calculations are incontrovertible, unless the prices of coal and oil vary from the figures given. We have done at times even better than those figures at Louisville, and proportionately as well at other places where a smaller output of our gas is exhibited. With a twenty millions plant, the figures would be still further reduced, and twenty millions, we think, would suffice for at least four or five years for the city's daily output.

There is nothing surprising in such figures; for three years ago, when we made our first offer to the city, The Economical Gas Construction Company of Toronto offered also to construct a machine to generate gas for the city at 25 cents. Mr. Addicks, although not willing to *sell* gas at that figure, because as he said to Councils committee "there would not be a sufficient margin of profit," admitted that it could be made for 21 or 22 cents, and it is respectfully suggested that if President Dolan will submit the books of the Philadelphia Gas Improvement Company at the Twenty-fifth Ward works, showing the cost of coal, oil, and labor used in generating and purifying, the inferior gas his Company is making and selling for 87 cents to the city at a high temperature (the contraction of which explains part of the great leakage reported by the Bureau), it will be discovered that even the old fashioned apparatus that is used up there makes such gas for less than 25 cents put in the holders. Of course there is no way of legally compelling the exhibition of those books, but I venture the assertion that the cost of the gas does not reach anything like 25 cents per M, and a voluntary production of a portion of the books of that Company would either affirm what I say or at least contribute valuable statistics to the current gas literature. Be that as it may, we know what we can do, and it costs the city nothing for the experiment.

Exhibit B.

ESTIMATED PROFITS OF MUNICIPAL OPERATION OF PHILADELPHIA GAS WORKS. *

TABLE 1.

(Based on actual operations of Bureau of Gas during 1896.)

Profit as per report (which includes insurance)	$353,988 00
Deduct items of disbursements—bookkeeping, auditing, lighting and rentals, which aggregate	281,569 00
Amount remaining	$71,419 00
Add gas furnished gratis to the city worth at $1.00—$674,081 00. But as it is contended that only the cost of the gas should be added I assume that Councilman Brown's very careful estimate of 80 cents per M—the actual cost to the city—should be allowed. This would be	$539,224 00
Total	$610,643 00
Deduct water rent, as per calculation of Director of Public Works	$11,756 00
The actual profit for 1896	$598,887 00

Unless a search through some other Bureau or Department should discover other disbursements properly chargeable to the Bureau of Gas, which its bookkeepers have omitted, the figures herein arrived at may be presumed to be approximately correct.

In using said figures, however, as a factor in calculating future profits, it should be remembered that the Bureau bought its coal for 1897 at 30 cents per ton cheaper than in 1896. Thus 335,056 tons according to the Chief of the Bureau cost last year, $1,049,969 00 which would be about $3.42 per ton.

Now assuming the use of only the same amount of coal for 1897, which we know cost an average price of $3.12 per ton, the total cost of 335,056 tons at that rate would be	$945,374 00
making a saving on that item alone of	$104,595 00
which added to the above profit of	$598,887 00
would increase it for 1897 to	$703,482 00

I might perhaps add a further saving of 17 cents per ton, or $56,959, to the above handsome balance, because it has been clearly shown that the coal could have been bought for $2.95 instead of $3.12 per ton, the former being the bid of W. T. Rainey & Co., which, as already recited, was turned down by the Chief of the Bureau without adequate reason and under pretexts that were unfair and unjustifiable. I however prefer to predicate my calculations on actual rather than hypothetical transactions.

(*). These figures are taken from the report of Director of Public Works, with the annexed report of the Chief of Bureau of Gas, as amended by deduction of disbursements for bookkeeping, auditing, lighting and rentals as per Heins Lybrand and Co's statement to President Dolan.

TABLE II.

(Based on business of 1896 if water gas at 37 cents per M had been exclusively used.)

If the city had during 1896 abandoned the manufacture of coal gas and made its own water gas at a cost even as high as 37 cents (the price paid to the Philadelphia Gas Improvement Company), its disbursements on last year would have been on

2,997,065,000 feet manufactured at 37	$1,108,914
1,916,396,000 " purchased at 37	$709,066
4,913,461,000 " at 37 would have cost	$1,817,980
which, deducted from actual cost of both coal and water gas	$2,427,043
would have saved the city	$609,063
which, added to the profits calculated in Table I	$598,887
would have increased the profits to	$1,207,950

TABLE III.

(Based on business of 1896, if modern water gas plants had been exclusively used and distribution expenses reduced one-half.)

If the city had in operation a modern water gas plant such as has been offered to it (acceptable only after its guarantees had been tested and sustained), it certainly would not have cost more for a very superior gas than 25 cents per M. put in holders. Then last year's business would have resulted as follows:

4,913,461,000 feet at 25 cents	$1,228,365
which deducted from actual cost of both coal and water gas	2,427,043
would then have saved the city	$1,198,678
which, added to the profits calculated in Table I	$598,887
would make a total of	$1,797,565
These calculations are all on the theory that the cost of distribution—which includes leakage—would remain the same as in 1896 which is too extravagant for a moment's consideration. If we call such cost the entire disbursements of the Bureau less the cost of gas $2,427,043 it would be $1,125,060. While it is believed, that the distribution expenses could be reduced to one third that amount, as Director Thompson thinks the leakage could be by new mains, holders and new management, yet we will call it one-half. Adding the one-half so saved	$562,530
And our net profits would be	$2,360,095

TABLE IV.

(Estimated on future increase of business.)

Tables I, II and III are predicated on the business of 1896, yet the increase in consumption in 1896 over 1895 was 491,000,000 feet.

An examination of the Reports of the Bureau (pages 89, 90 and 91) will show that in the three periods therein mentioned, the *increase* of gas manufactured was as follows:

1836–1858	from	6,481,000	to	480,206,000
1859–1884	"	562,100,000	"	2,557,600,000
1885–1896	"	2,757,000,000	"	4,913,461,000

During the last 13 years, the output was nearly doubled. Taking, however, the last 30 years for comparison with the next 30 years, and disregarding any greater ratio of increase by reason of the almost universal use of gas for fuel, we can safely depend on the natural increase of population alone to continue the 400% increase from 1867 to 1896 until 1927, when the consumption would, therefore, reach 25,000,000,000. But, taking half that amount for the annual average for each of the ensuing 30 years, which while too much for the first half of the period, is decidedly as much too little for the last half, and therefore, a fair average, it would cost as follows:

12,500,000,000 feet at twenty-five cents per M. (although it will probably be done for less)	$3,125,000
The distribution, after new mains and services and holders are put in, and the whole Bureau administered on a basis of business rather than politics, ought not to exceed seven cents and all other expenses three cents, or both together ten cents per M.; 12,500,000,000 feet at ten cents per M.	$1,250,000
Total	$4,375,000
Now if the present price of gas were maintained the sale of 12,500,000,000 feet would realize	$12,500,000
Less cost as above	$4,375,000
Profit of	$8,125,000
Less annual cost for improvements	
But the price of gas would be reduced by degrees, perhaps ultimately, to 75 cents and 50 cents. If to 75 cents the sales would realize	$9,375,000
If to 50 cents, the sales would realize	6,250,000

reducing the net income accordingly.

It is of course certain that after the introduction of modern generators and the renewals of the mains and services (which might require from three to five years), the price to consumers should be gradually reduced to 90 cents, 80 cents, etc.; but the new discoveries and economical appliances, would still further lessen the expense of manufacturing and delivery, and the division of resulting benefits to the consumer by cheapening the price of gas or to the taxpayer, by increased revenues to the treasury would be for the legislative branches of the municipality in their wisdom to determine.

IMPROVED TENEMENT HOMES FOR AMERICAN CITIES.

By Gustavus A. Weber.

There is no agency in the world that has a greater influence upon the welfare of the people than one which directly affects their health and social environment. Before modern institutions brought about the rapid concentration of population in the larger cities, there was little occasion for serious thought upon the housing problem. When it is considered, however, that the population of the eight leading cities in the United States increased from 24 to 119 per cent. from 1880 to 1890, and that this concentration steadily continues while the value of land is increasing in the crowded centres, the question becomes a serious one. It is serious, not only because it concerns the welfare of those whose circumstances compel them to live in crowded areas, but because the influences of disease and immorality resulting from improper city housing affects all the inhabitants of cities where "slum" conditions exist. It is in the slums of great cities that infectious diseases usually have their origin. It is there that pauperism, ignorance, cruelty, intemperance and crime are daily placing their stamp upon the coming generation. In a country where the ballot controls the destiny of the nation, too much cannot be done to remove all influences which tend to degrade the moral and physical condition of the people.

It has been the experience of all who have entered upon the work of improving the habitations of the poor, that such improvements have had a decided influence upon the character of the inmates. George Picot, the French philantrophist, has said that "the improvement of dwellings is the best guarantee of civilization." Lord Shaftesbury, the pioneer of the model housing movement in England, has remarked that he was certain that many people who are in a filthy and deplorable condition have been made so by their own surroundings. Dr. E. R. L. Gould, in his official report on "The Housing of the Working People," says, "Drunkenness is sometimes the cause, but is oftener the effect of poor housing. Physical exhaustion, nervous depression,

want of nutritious food, etc., stimulate alcoholic indulgence. Saloons are thickest in the worst centres. They would not be found there if they did not receive patronage." Again he says, "Bad housing is a terribly expensive thing to any community. Moreover, it explains much that is mysterious in relation to drunkenness, poverty, crime and all forms of social decline."

Fortunately, the introduction of rapid transit has afforded opportunities to many to escape from the crowded sections of large cities and to find homes in the outskirts where fresh air is plentiful. But the number of these who can afford the expenditure of the time and money necessary to avail themselves of this luxury is quite limited. It does not include any of what Mr. Jacob Riis terms "the other half."

The census reports show that the populations within the city limits continue rapidly to increase notwithstanding the removal of large numbers to the suburbs. A very considerable proportion of the people in large cities find it necessary to live within easy reach of their places of work. They must, therefore, not only live in the cities, but must concentrate in certain sections. Thus in New York city, at the time of the police census in April, 1895, one-half of the population of the entire city was crowded into certain wards whose total area was less than one-tenth of the entire city area. Two of the wards had a population of 643.8 and 539.5 persons to the acre, respectively, while in the city as a whole, the population was 46.7 per acre. Other leading cities show a similar though somewhat more favorable condition of concentration.

How these people are housed in New York city is so fully told in the works of Mr. Jacob Riis, in the report of the New York Tenement House Committee and in other official publications, that it is unnecessary to elaborate upon it here. It may be mentioned, however, that according to the last report of the New York Health Department, 1,487,392 persons comprising 339,237 families lived in what the law designates as tenement houses, occupying in the aggregate, 42,909 tenement houses, of which 2,448 were rear buildings.

A fair idea of the conditions in the leading American cities may be obtained from the "Slum Report" of the U. S. Department of Labor. In 1893 this Department conducted an investigation into the condition of residents in the slums of New York,

Philadelphia, Chicago and Baltimore. A house-to-house canvass was made, and the work was confined in each case to a small portion of the city, comprising what was considered to be the worst of the slums. The population of the districts canvassed was 28,996 in New York, 19,748 in Chicago, 18,048 in Philadelphia and 17,960 in Baltimore. The report shows that one-room tenements were occupied by 13.16 per cent. of the families canvassed in Baltimore, 12.10 per cent. in Philadelphia, 5.87 per cent. in Chicago and 5.62 per cent. in New York. In New York over one-half of the families canvassed lived in tenements of two rooms and less. In the other cities, the greater proportion occupied from one to three rooms.

It is generally conceded that every adult person ought to have 600 cubic feet of air-space in his bedroom, and if it is less than 400 cubic feet per person the health of the occupants is seriously endangered. The above-mentioned report shows that of the slum population canvassed in New York city, 80 per cent. had less than 600 cubic feet of air-space each in their bedrooms, and 61 per cent. had less than 400 cubic feet. In Chicago, the proportions were almost exactly the same. In Baltimore and Philadelphia the conditions were more favorable. In the former city, 61 per cent. of the slum population canvassed had less than 600 cubic feet of air-space per person, while 33 per cent. had less than 400 cubic feet. In Philadelphia, the percentages were 60 and 36 respectively. It must also be remembered that in most cases the bedrooms were poorly lighted and ventilated and were often used for cooking, working and other purposes during the day. It is needless to say that in the congested districts of large cities, the lack of sufficient sleeping accommodations necessitates the crowding of persons of opposite sex, of children and adults, of members of the family and boarders, into the same bedrooms and even into the same beds.

A glance at the rent rates charged in the slum districts investigated shows that the tenants of the slums do not obtain their habitations as cheaply as might be supposed. In the slums of Baltimore, the greater number of the two-room dwellings canvassed rented for from $0.70 to $1.15 per week; in Chicago and Philadelphia, from $1.15 to $1.60 per week; and in New York city, from $1.60 to $2.10 per week. For the three-room tenements the rents generally ranged from $1.15 to $1.60 per week in Balti-

more; from $1.60 to $2.30 per week in Chicago and Philadelphia, and from $2.30 to $3.00 per week in New York. Experience in New York, Brooklyn, Boston and many European cities, shows that by charging similar rates as those usually paid for tenements in slum property, model houses can be constructed at a fair profit.

In order to secure improved housing conditions in crowded districts of large cities, both public intervention and private enterprise are essential. It is plain to every thinking mind that under existing conditions, the subject of providing better habitations for the poorer working classes and thereby securing their hygienic and moral improvement, is a proper one for the consideration of state and municipal governments. The only question is, how far shall the public authorities go, and in what manner shall they exert their power in order to bring about the desired improvement.

The first and most important step is the enactment of proper sanitary and building laws and the inauguration of a thorough system of tenement house inspection. Second in importance is the expropriation of property in the crowded districts. Another step, which is common in European countries, is the encouragement of model tenement enterprises by granting them special favors, such as reducing the tax rates, ceding land, granting subsidies, making loans at a low rate of interest, etc. Lastly, when private and philanthropic enterprises refuse to provide proper housing facilities, it becomes the duty of the local authorities to do so.

With regard to the first step much has been done in a few American cities. New York city has to-day probably the best sanitary code and the best organized corps of sanitary inspectors that can be found in any American or European city.* The Health Department has executive, judicial and legislative powers, and establishes its own sanitary code in conformity to the sanitary laws and ordinances. It may order the inspection of tenement houses at any time and may call upon the police au-

* The special laws which govern tenement and lodging houses in the city of New York may be found in Sections 642 to 667 of the Statutes of 1882 and Chapter 84, 1887; Chapter 275, 1892, and Chapter 567 of 1895. The last mentioned law was passed in compliance with the recommendations of the New York Tenement House Committee appointed by Governor Morton in 1894.

thorities to enforce the sanitary laws and regulations. It may order houses vacated when unfit for human habitation and may even have them removed. Also, it may issue orders requiring a reduction in the number of occupants of overcrowded tenements. Any refusal to conform to these regulations or obey these orders may be punished as a misdemeanor. The department has at its disposal a corps of eighty-seven sanitary officers and inspectors, whose duties are to make regular inspections of tenement and lodging houses, investigate complaints and see that the sanitary laws and regulations are complied with.* Notwithstanding the excellent laws in force, the work of transforming the slums of New York City is such a stupendous undertaking that it requires a long time and much energetic work on the part of the authorities.

Of the other leading cities, Philadelphia and Chicago have in recent years had improvements made in their sanitary laws and ordinances relating to tenement houses. A Pennsylvania statute of 1893 provides that each tenement house shall have an adjoining open space of at least twenty per cent. of the entire area; that it shall have receptacles for ashes and fire escapes; that every room and every hall on each floor shall have at least one window opening upon a street or open space; that no room shall have less than 700 cubic feet of air space, and that each flat shall have a separate water closet, sink and water supply. This act, of course, applies only to tenement houses erected or altered after its passage. Recent improvements have also been made in the organization of the Philadelphia Board of Health looking toward the establishment of a more efficient corps of medical inspectors for the purpose of detecting the causes of contagious diseases, etc.

In Chicago, during the present year, an ordinance has been passed by which buildings unfit for human habitation are regarded as a public nuisance and are required to be vacated.

Boston and Brooklyn have made no changes in recent years in

*To give an idea of the work of the New York Health Department with reference to tenement houses it may be stated that in 1896 109,184 inspections were made, resulting in 38,858 complaints upon which orders were issued. Three hundred and twenty-two houses unfit for human habitation were ordered vacated. In 264 cases the houses were placed in proper sanitary condition and in 58 cases they were vacated. During the year 45,601 night inspections were made, resulting in the issuing of 218 orders to reduce the number of occupants in overcrowded apartments.

their sanitary laws, but existing regulations are fairly comprehensive and their health departments are well equipped.

In regard to the second step, namely, the expropriation of crowded areas for sanitary purposes, the city of New York is the only one of the larger American cities that has done anything in recent years. In 1895, two acts were passed by the State Legislature authorizing the expenditure of $5,000,000 for the expropriation of propery and the establishment of small parks in the most crowded sections of New York city. The following table, kindly furnished by Mr. Charles G. Wilson, President of the Health Department of the city, shows to what extent the provisions of these acts have been carried out:

PROPERTY EXPROPRIATED FOR PARK PURPOSES IN NEW YORK CITY.

Location.	Area in acres.	Value of expropriated property.	Population displaced.
Mulberry Street Park Street Baxter Street Bayard Street	2.74	$1,476,557	2,643
East Broadway Canal Street Essex Street Hester Street Suffolk Street Jefferson Street	1.9	Not yet fixed.	2,917
Pitt Street East Houston Street Sheriff Street Stanton Street	3.44	Not yet fixed.	3,879
Cherry Street Jackson Street South Street Corlears Street	3.3	$1,370,421	Unknown, mostly small houses and many lumber yards and shops.
East 111th Street First Avenue East 114th Street River	8.5	Not yet fixed.	4,104
West 28th Street Tenth Avenue West 29th Street Ninth Avenue	3.67	Not yet fixed.	1,763

In addition to the above there were condemned during the year 1896, eighty-seven separate pieces of property (rear tenements) for sanitary reasons.

While in other American cities, little or nothing has been done in this direction, and while parks, play-grounds and other breathing places are still very scarce in the sections where they are most needed, European cities for many years have directed their attention to this feature of reform. As early as 1868, urban

sanitary authorities in England were authorized to provide for the improvement or demolition of houses inhabited by working people. In 1890 a very comprehensive law was passed by Parliament, known as the "Housing of Working Classes Act," which relates to the clearance of unhealthy areas and the erection thereon of dwellings for the working classes, the inspection, closing and demolition of unhealthy dwelling houses, and the establishment of public lodging-houses.

The cities of London, Edinburgh, Glasgow, Liverpool, Manchester, Birmingham, Newcastle-upon-Tyne and Dundee have availed themselves of the provisions of these acts and have condemned and removed houses in crowded or filthy sections; in some cases providing open spaces and play-grounds, and in others constructing model tenement houses. A recent official publication of the London County Council states that up to December 31, 1895, $10,104,727.61 were expended upon schemes carried out under this and previous acts. Of this amount $9,252,710.52 were used for clearing unhealthy areas and $563,195.18, for the erection of dwellings.

In Belgium, as early as 1858 and 1867, laws were passed regulating the expropriation of unsanitary quarters in cities.

Nothing has been done by public authorities in American cities in the way of encouraging model tenement enterprises, unless we include under this designation, the enactment of laws for the closing and demolition of unhealthy tenement houses and the placing of such restrictions upon the builders of new ones as will practically produce model houses. Such laws and regulations, if rigidly enforced, would necessarily give the greatest encouragement to all enterprises for the improvement of the housing of the working people.

In England the public authorities have gone much further. In addition to the provision of rigid sanitary laws and regulations the English statutes require all corporations which obtain the right of expropriation to make provision on the same site or in the neighborhood for the accommodation of at least one-half the number of people displaced. An act passed in 1882 authorizes municipal corporations to make grants or leases for terms not exceeding 999 years, of any land belonging to them, for the erection of workingmen's dwellings, the corporations being empowered to bind the grantees or lessees to build in a prescribed

manner, to repair and maintain the buildings and to impose other limitations. In the city of London, millions of dollars have been loaned by the public authorities to model tenement enterprises.

France, Belgium and Austria also have laws providing for the encouragement of private enterprises. These relate principally to the recognition of such enterprises as institutions of public utility and thus they receive many privileges, such as the remission of taxes.

The erection of model tenement houses by municipal corporations meets with disfavor among many persons. Experience in England, Scotland and France has shown that where the public authorities have built model tenements, a higher class of people than those for whom they were intended, have often availed themselves of these advantages. Whenever this is the case, the public authorities come into competition with private enterprise for there are usually a sufficient number of suitable private houses to be had, the rentals of which are within the means of the better paid artisans, clerks and shop keepers. The provision of general living accommodations is in no sense a natural monopoly, and it is certainly not advisable for public authorites to embark in that business unless, on account of the failure of private enterprise, it becomes necessary for the safety and welfare of the poorer people to do so. Whenever large, populous areas are expropriated and the displacement of the inhabitants is likely to cause serious hardships, or whenever it is apparent that the poorer people are in need of proper accommodations, and that all means have been exhausted to induce private enterprise to supply the need, then and then only are public authorities justified in erecting tenement houses or other living accommoditions for the poorer working classes.

In the United States, no steps have ever been taken by the public authorities in the way of erecting municipal tenements. In England, more than in any other country, municipal authorities have embarked in such enterprises. In London, Manchester, Liverpool, Glasgow, Birmingham and Huddersfield, dwelling houses have been constructed and are being managed by the municipal corporations. While in some cases these buildings do not accommodate the poorest classes, their erection was usually the result of circumstances which justified the undertaking.

Illustrative of such instances is the case of Liverpool. Here the authorities concluded to improve what was then considered to be the filthiest and most crowded section of the city, and in order to do so, they expropriated an area of 18,770 square yards, exclusive of streets. This site had been occupied by low class, unhealthy dwellings, interspersed with stables and tanneries, and had a population of about 282 persons per acre. The entire area was acquired by the city and the buildings razed to the ground. At first it was not the intention of the authorities to construct municipal tenements and the land was offered for sale. But as the conditions of the sale required the purchaser to construct suitable and healthy dwellings, and to charge rates which would be within the means of the people displaced, no purchasers could be found. Finally, the city concluded to build tenement houses on a portion of the site, another portion being sold by the corporation.

In Glasgow, as in Liverpool, the construction of model tenements by the municipal authorities, was the result of the expropriation of an unsanitary area, and the inability to secure private enterprise to construct suitable dwelling houses for the displaced population. In this case, however, the tenement houses erected by the corporation were so elaborate in their interior arrangements that the rents necessarily charged were too high for the poorer classes. The result was that the tenements were rented to artisans, clerks and shop-keepers, and the real purpose in view was not attained.

In London, in addition to the expenditure of over ten million dollars by the County Council for the expropriation of unsanitary areas and the creation of model tenements, as already mentioned, the corporation of the City of London in 1895, demolished 164 tenements, cleared 79,198 square feet of land and constructed five blocks of buildings at a total expense of $980,885.

While in exceptional instances municipalities may be justified in providing healthy homes for the poorer working classes, the great work of furnishing improved homes for these people devolves upon commercial and philanthropic enterprises. Philanthropy has done much in European cities towards accomplishing this end, but it alone can do but a very small proportion of the work needed in all large cities. The great problem with respect to model tenement houses is how to secure the investment of capital on a paying basis in such enterprises.

As legislators and executive authorities begin to realize the importance of good housing, and as the sanitary and building regulations of large cities become more and more stringent in their requirements, the ownership of slum property will gradually become less profitable and less desirable. Landlords owning property which is in such a condition that they are constantly required to make changes and improvements or to vacate the premises, will eventually become tired of the importunities of the sanitary authorities, and will either dispose of this class of property or will thoroughly renovate it.

This circumstance opens a splendid field for model building enterprises. While it might be unprofitable to invest comparatively small amounts of capital in the construction of tenements in crowded centres which fulfill the requirements of stringent sanitary and building regulations, the clearing of considerable areas and the construction of model tenements on a large scale realizes fair profits on the capital invested.

During the past twenty years large tenement enterprises have been organized in many cities, frequently as a direct consequence of improved sanitary and building laws. New York city, Brooklyn and Boston in this country; London, Manchester, Liverpool, Glasgow, Edinburgh and Newcastle-on-Tyne, in Great Britain; Paris, Lyons, Marseilles, Rouen, Rheims and several smaller cities in France; Berlin, Frankfort, Leipsic, Dresden, Hanover and Halle, in Germany; Amsterdam, in Holland; and Stockholm and Gothenburg, in Sweden, all have large companies for the construction of model tenements which have been successful. Some of these institutions were organized on a purely commercial basis and distribute all their net earnings as dividends to the share-holders. Most of the companies in England and America are of this character.

Another class may be called semi-philanthropic. These are organized on a commercial basis, but the dividends are usually limited to four or five per cent. of the actual invested capital, the balance of the net income being devoted to improvements, the extension of building operations, etc. In some cases in Europe such enterprises receive special favors from the public authorities.*

* The City and Suburban Homes Company and the Tenement House Building Company of New York and many of the European companies are organized on this plan.

Purely philanthropic institutions are usually the results of donations or bequests. These funds are usually in the hands of trustees who construct and manage the buildings and devote all the net earnings to the extension of operations. Such enterprises exist in London, Paris, Leipsic, Dresden and Gothenburg.

In a few German cities working people have created co-operative building funds for the construction of model tenements. By making small weekly contributions they accumulate, from time to time, sufficient amounts to purchase building sites and erect buildings. The tenements are then rented to share-holders and, as the funds increase, new buildings are added, and the contributions continue until all share-holders are housed.

But whatever may be the character of the enterprise many elements determine its success or failure. If it is properly managed, if the houses conform to the peculiar requirements of the locality and are economically constructed, and if the rents charged are about the same as are usually paid in the vicinity, there is no doubt that the money invested will bring sure, safe and stable returns. The question of proper management is easily solved if a board of experienced men can be secured who will guard the interests of the company or trust, and who will keep constantly in touch with the actual administration; if the officers and employees are well paid and are thereby encouraged to put forth their best efforts to promote the success of the enterprise; and if strict and inflexible rules are adopted to secure the prompt payment of rents and the maintenance of peace and order on the premises.

Whenever tenement houses are constructed they should be placed on sites which are convenient to the class of people intended to be housed. In the construction of the buildings the chief aim should be to insure privacy, health, safety and comfort to the tenants. The buildings should not be too ornamental in architecture, nor so severe as to be uninviting. Both extremes in this respect should be carefully avoided. Some years ago a magnificent tenement house was constructed which proved a failure because its "high-toned" appearance frightened away the people for whom it was intended, and its location made it undesirable for a better paid class of tenants.

Whenever the cost of the land will permit, small tenement houses are preferable to these on a larger scale. In the crowded

sections of New York, London and a few other cities where land is very valuable and where the people are necessarily confined to a comparatively small area, large tenement houses of five and six stories cannot be dispensed with. But in cities like Philadelphia, Baltimore and St. Louis model tenement houses need not exceed three or four stories in height.*

A few suggestions for general application in the construction of model tenement houses may be of interest in this connection. While they may not all be applicable in any one case, they may in a general way serve to guard against serious mistakes, such as have been made in the past.

When a site is being selected, preference should be given, if possible, to one which is regular in shape, as this will permit the most favorable arrangement of the buildings. The buildings should be arranged in such a manner that daylight can penetrate directly into each room. Where the conformation of the site permits the building of rows, the latter should, if possible, run from north to south so that the windows face east and west. By this arrangement the sunlight can penetrate more vertically into the courts and streets, while the oblique rays enter both the front

*A very desirable style of tenement house for less crowded localities is the type adopted by the Boston Co-operative Building Company in what is known as the Harrison Avenue Estate. This consists of four blocks or rows, comprising twenty-four houses, arranged around a hollow square. Each house has twenty feet frontage and is thirty-eight feet deep, leaving an open space in the centre eighty by one hundred feet in area, which is used as a play-ground. The houses are three stories high, most of them having one, and a few having two tenements on each floor. The tenements contain two, three and four rooms each, and are self-contained in every respect. The twenty-four houses accommodate eighty-four families. The annual rent receipts amount to a little over ten per cent. of the original cost of the estate.

When large modern tenement houses are necessary, the plan adopted by the City and Suburban Homes Company of New York, or that of the Riverside Buildings of Brooklyn may be recommended. The former seems to be the most nearly perfect form of structure that can be desired for economizing space, and embodies the latest ideal with regard to the provision of light, ventilation, and privacy. But as the buildings on this plan have only recently been constructed, nothing can be said to the degree of favor with which they will be received by tenants.

The Riverside Buildings in Brooklyn have been in use since 1890, and their construction has been a paying investment. A complete technical description of the Riverside Buildings, together with plans, may be found in the Eighth Special Report of the U. S. Department of Labor on "The Housing of the Working People," which also contains much other valuable and interesting material. The plans adopted by the City and Suburban Houses Company are illustrated and described in the December, 1896, number of the "Review of Reviews."

and rear windows. Cellars, basements and attics should never be used for living purposes. They may be used for laundries, drying, fuel storage, etc. A separate space should be provided for each tenant for fuel and storage. Each tenement should be self-contained, that is, it should have a separate water supply, sink, pantry, water-closet, and, if possible, a bath-room and a vestibule within the confines of the dwelling. The rooms of each tenement should be so arranged that they may be independent of one another and that they can be easily ventilated by opening the doors and windows. If one-room tenements are provided, they should be rented only to single persons, and they should have all the conveniences that are provided for larger apartments. Arrangements should be made for the prompt disposition of slops, ashes, refuse, etc., and, in general, the best provisions possible should be made to facilitate the tasks of the housewife.

Tenements should contain, as a rule, from two to four rooms each. There is not much occasion for larger apartments, as the class of people housed cannot afford to pay for them. If the tenement buildings are extensive, it may be desirable to provide space for stores on the ground floor, play-grounds for the children, and offices and dwellings for the care-takers. The staircase should be near the outer walls in order to be sufficiently lighted and ventilated. They should be easy of passage and should be constructed of non-combustible material, especially in large tenement houses. The tenements should, if possible, be grouped around the staircase so as to communicate directly and to avoid common hallways and corridors. The latter are difficult to light and keep clean, and often serve as loafing places. If the tenements consist of more than one room they should be lighted from two sides in order to be better exposed to the sunlight and more easily ventilated. The courts should be as open as possible and should never be obstructed by sheds or other objects. It is well to set aside a portion of the court for walks or driveways, for plants and for children's play-grounds. Whatever space is not so used should be paved with concrete and the surface should be inclined toward the sewers.

Many other suggestions might be made in regard to materials used in construction, interior arrangements, dimensions of rooms etc., but their application would depend largely upon local conditions, the character of the buildings and other considerations.

Much has been published regarding the various model tenement enterprises in this country and in Europe, their business operations, plans, etc. It is unnecessary to describe any of them in detail, but a brief review of some of the representative types of organization and their distinctive features is of interest.

Purely philanthropic tenement building enterprises do not exist in this country. The oldest and wealthiest of such institutions is the Peabody Trust in London. This fund was created in 1862, by Mr. George Peabody. Up to the close of the year 1893, £1,242,048 ($6,045,000) had been expended by this trust upon land and buildings. Of this amount, £500,000 was donated and bequeathed by the founder, £610,908 had accummulated from rents, and the balance had been borrowed, mostly from the Public Works Loan Commissioners. Since the founding of the Trust, the net annual earnings have been from 3½ to 3¾ per cent. on the accrued capital. All the net earnings of the fund are added to the principal and thus serve to permanently extend the work of tenement house construction.

At the close of the year 1893, the trust owned eighteen groups of buildings, containing 11,273 rooms, and accommodating 5,070 families, and several other buildings were in course of construction. The weekly rents paid by the tenants varied from $0.49 to $0.73 for single rooms, $0.79 to $1.28 for two-room tenements, $1.03 to $1.58 for three-room tenements and $1.70 to $1.83 for four room tenements. The average weekly rent charged is about fifty-two cents per room. The Peabody tenements are very much in demand and the annual loss in rentals is insignificant. The buildings are scattered throughout the crowded sections of London, and the greatest care is exercised in the selection of the sites so that the buildings are located where they are most needed. Some idea of the influence of the Peabody tenements upon the condition of the people is obtained when one learns that the death-rate in these houses is lower and the birth-rate higher than in the city at large.

Other leading institutions of this character are the Guinness Trust of London, founded by Lord Iveah (Edward Cecil Guinness), a wealthy brewer; the tenement houses of the Philanthropic Society of Paris, France; the model tenement buildings at Leipsic, constructed by Herrmann J. Meyer, a wealthy publisher of that city; and the Robert Dickson Fund of Gothenburg, Sweden.

There are three large tenement enterprises in this country that may be classed as semi-philanthropic, namely, the Tenement House Building Company of New York and the Improved Dwellings Association of Boston, which limit their dividends to four per cent, and the City and Suburban Homes Company of New York, which places the limit at five per cent. All net earnings beyond these figures are set aside as reserve funds, which may be used to secure stock-holders against cessation of dividends in periods of depression, to make improvements and to increase the field of operation.

The property of the Tenement House Building Company of New York, which is valued at $160,000, is situated at Nos. 338 to 344 Cherry street. It consists of a row of houses six stories high, and provides accommodations for ninety-four families. The tenements consist of two and three rooms each. The two-room tenements rent for from $6.50 to $8.00 per month, and the three-room tenements for from $9.50 to $14.00. Since its organization this company has paid the full four per cent. dividend.

The Improved Dwellings Association of Boston has a capital stock of $100,000, and its lands and buildings cost $120,687. The Association owns three estates, accommodating ninety families. Only one of these estates consists of original model tenements; the others were old buildings cleaned and remodeled by the company. The weekly rent rates in the model tenements vary from $1.00 to $1.10 per week for one-room tenements, $1.25 to $1.80 for two-room tenements, $1.75 to $2.40 for three-room tenements, and $2.50 to $2.75 for four-room tenements. In the remodeled buildings the rental rates are much lower. A dividend of four per cent. has been paid since the formation of the Association.

The City and Suburban Homes Company, which was organized July 6, 1896, promises to become the most extensive model building enterprise in this country. Its organization was the outcome of the Improved Housing Conference held in New York city in the spring of the same year. Its object is to supply to wage earners in New York city improved sanitary homes at current rates, and at the same time to offer to capital a safe and permanent investment. Its capital stock is $1,000,000. While a large number of the share-holders are among the wealthiest men in New York, the company is intended to become a thoroughly popular institution and to afford a depository for the savings of

the masses, which may be utilized in benefiting their fellow-men. For this reason the denomination of the shares is fixed at ten dollars each. Thus far, the Company has purchased three sites. On one of these sites situated on West Sixty-eighth and West Sixty-ninth streets, between Tenth and Eleventh avenues, a group of buildings accommodating 375 families, is in course of construction, and will be ready for occupancy on February 1, 1898. These buildings, as already mentioned, contain all the advantages suggested by the experience of all other leading enterprises, in regard to economy of space, light, ventilation, comfort, privacy, etc. In addition to the construction of model tenement houses, this Company provides suburban homes for a better paid class of working people. These houses are to be purchased by the tenants and paid for in monthly installments during periods of ten, fifteen or twenty years, at the choice of the purchasers. The payments also cover the cost of life insurance, so that in case of the death of the purchaser the debt is immediately paid.

Semi-philanthropic companies are also found in London, Glasgow, Marseilles, Berlin, Frankfort, Dresden and Gothenburg.

By far the greatest number of model tenement enterprises are organized on a purely commercial principle. The Improved Dwellings' Company of Brooklyn, New York, founded by Mr. Alfred T. White, is the largest and perhaps the most successful institution of this class in this country. This Company owns three groups of buildings accommodating nearly five hundred families. The total value of the land and buildings owned by the Company amounts to about $673,000. The weekly rent rates range from $1.20 to $2 for two-room tenements, $1.80 to $2.60 for three-room tenements and $2 to $3.30 for four-room tenements. The net annual profits derived from this investment have been from five to ten per cent. on the capital. The tenants of this Company are mostly of the poorer working classes. The buildings contain, in addition to the excellent housing accommodations, a circulating library and a bath house with hot and cold water, both of which are for the free use of the tenants. The Riverside Building, which is the largest of the group, has a spacious open court with driveway and parking, a music pavilion and a children's play-ground. The houses are attractive in architecture and strongly built, and have fire-proof staircases. The tenements are always fairly well filled.

The Improved Dwellings' Association of New York city is another successful enterprise of this class. This Company owns one tenement building accommodating about 220 families. The value of the land and buildings is estimated to be about $300,000, and the enterprise pays about 9 per cent. per annum on the investment. The building contains two, three and four room tenements. Hot and cold baths are provided for the free use of the tenants.

In Boston, Mass., the Boston Co-operative Building Company has existed over twenty-five years. This Company has five estates valued at about $340,000, and accommodates 321 families. The buildings owned by this Company are smaller than those usually known as tenement houses, being from two to four stories in height. The weekly rents vary from 75 cents to $1.07 per room. The enterprise pays about six per cent. on the capital invested.

Companies organized on a purely commercial basis have existed in London, England, for over thirty years, many millions of dollars being profitably invested in such enterprises. They are also found in Edinburgh, Paris, Rouen, Berlin, Frankfort and other European cities.

While the model tenement enterprises do not usually realize immense profits to the investors, they certainly insure a safe and fair return on the money invested. This fact has been established beyond a doubt both in this country and in Europe. It is not only in such largely overcrowded cities as London and New York, that better tenement houses are needed, but all large cities which have proper sanitary and building laws offer profitable fields of investment for model tenement enterprises. The best form of organization is what is here referred to as the semi-philanthropic plan. With a limited dividend, the surplus earnings can be devoted to a fund for the extension of the operations and for use in case the earnings should fall below the fixed rate. Thus the investment is safe, and a fair rate of interest is always assured.

In addition to receiving a fair return from investments in model tenement houses, investors in such enterprises have the satisfaction of knowing that they are improving the health, and the mental and moral condition of their less fortunate fellow men; that they are reducing the death rate and thereby saving many lives; that they are reducing the amount of drunkenness and

crime; and that they are providing clean and happy homes, where before were squalor and misery. The results of such changes upon the coming generation are inestimable.

But, as stated before, the successful model tenement enterprise depends very largely upon the sanitary and building regulations and their enforcement. It therefore becomes the duty of all who are interested in state and municipal affairs, to study the question of tenement housing, and to use their influence to secure the passage and enforcement of such laws as will forever wipe out the slums of all American cities.

BOOK REVIEWS.

THE STUDY OF CITY GOVERNMENT.

The Study of City Government: An Outline of the Problems of Municipal Functions, Control and Organization. By DELOS F. WILCOX, A. M., Ph. D. New York, The Macmillan Company, 1897. 12 mo., 268 pp. Cl. $1.50.

This little book might well be entitled "a guide to the study of municipal government." It is, the author tells us, intended to show people what there is to study in city government. It appears to be well adapted to its purpose. It consists mainly of a very clear analysis of the principal features of municipal government. The analysis is copiously illustrated from the experience of various cities. The illustrations are mainly chosen from the United States, although there are many references to European cities showing wherein their solution of problems differs from ours.

As is suggested in the title of the book, the author presents his subject in the form of a series of problems. It is not within his purpose to solve these problems, although many helpful suggestions as to the solutions are offered. There are, according to Mr. Wilcox's analysis, three sets of municipal problems. The first are those which arise in connection with the determination of the proper functions to be performed by city governments. The second are those which arise in connection with the methods of control, and the third those relating to the forms of organization.

In order to ascertain what are the problems of functions the author passes in review all the different activities of city governments. These are arranged in various sets under different categories with some attempt at classification. Thus, he divides the activities of cities into external and internal, and the latter into primary and secondary. There is little to be said for this classification. It serves the author's purpose of presenting a list of functions fairly well, but beyond that it does not and cannot go. It would have been an advantage even for the temporary purpose for which the author required a classification, if one revealing something of the real nature of the functions performed had been adopted.

The chapter on the problems of control deals mainly with the control exercised over city authorities by the central government of the State. The control exercised by the people through election, petitions, the referendum, etc., is omitted because "not peculiar in any great measure to city government as opposed to general government" [p. 72]. In this part of the book the author follows Professor Goodnow quite closely. He favors administrative control as against legislative.

The most space is devoted to the problems of organization, since this is the field in which most active interest has been taken by "reformers." Here the "problems" are collected under the headings of "the electorate," "the division of the city into districts," "the council," "the head of the corporation," "the administrative departments" and "the city judiciary." He finds "that during recent years municipal reformers in the United States have made it their chief purpose to get responsibility centralized in the hands of one man, the Mayor" [p. 227]. The purpose of this movement

is the centralization of responsibility. In connection with this the author ventures away from mere analysis and enters into a brief but interesting discussion of the bearing of this movement upon democracy. He says, among other things, that "this movement takes for one of its premises that the people themselves are 'good,' but that they have been hoodwinked by professional plunderers through the manipulation of a bad system of political organization. As a matter of fact, the people are not very good, and in many cases they do not want very good government" [p. 229]. This statement seems to be very well confirmed by the outcome of the recent election in "Greater New York." He then goes on to show that even if the people were "good" honesty is not the only pre-requisite for a good municipal officer. "A man cannot be taken from the merchant's store or from the workman's bench and be turned into an efficient administrator by the simple magic of popular election by free citizens of a great republic" [p. 230].

All of this is very true. But the author immediately forgets a fact that is equally true, namely that there is no magic in the exercise of the right of suffrage that will make the people any better able to handle the problems of municipal government than their chosen representatives are likely to be. "In order," he says, "that democracy shall succeed, the political capacity of the people must increase in proportion to the increased difficulty of the problems of government" [p. 233]. If this is the only hope of saving democracy, it seems on the author's showing to be a very weak one. Municipal government is, as Dr. Wilcox says, a delicate task. "It demands the highest wisdom of the State as well as the best abilities of citizens in all fields of science and art" [p. 242]. Democracy is at stake, yes, more than that, it appears to be hopelessly doomed as a satisfactory form of government for great cities. Why not admit this frankly and begin the search for a new and better system of government? Are we justified in supposing that we have reached the end and realized the ultimate perfection in government? Is it the depths of pessimism to admit the failure of democracy?

Even if the political capacity of the people could be increased to the point at which they would be able to solve these problems which Dr. Wilcox has outlined, would it be to their advantage? Each citizen can attend to the public business only by sacrificing his own private business. If *all* the citizens do this, the general economic efficiency will be much lowered. Dr. Wilcox shows us very plainly that we are suffering from too much democracy, and yet he proposes to give us more of it. What guaranty have we that such a homeopathic remedy will in this instance work a cure?

University of California. CARL C. PLEHN.

THE DWELLING HOUSE.

The Dwelling House. By GEORGE VIVIAN POORE. London, Longmans, Green & Co., 1897. 12 mo., 178 pp. Cl. $1.25.

This little book of 178 pages with 36 illustrations contains much valuable matter in relation to domestic sanitation, and it should find many American readers. The author is a physician and member of several sanitary organizations, and the substance of his book has been delivered in the form of addresses before the Royal Institution, the Sanitary Institute and other bodies. Unlike most works of a popular character which are either mere compilations from larger standard works, or amateur generalizations based upon insufficient data, the present book is the result of independent observation, especially in the direction of the relation of the soil to disease. Dr. Poore has made some

very interesting experiments which seem to show that he is right in asserting that the true way to dispose of sewerage and slop water is to return it directly to the soil, where if it is deposited sufficiently near the surface so that the air can penetrate, it will take care of itself without risk or offence of any kind. He contends that the upper soil can alone assimilate organic matter, and that the sub-soil has no such power. He considers the earth closet system of sewerage disposal preferable to the water carriage system as there is less material to be gotten rid of. In Chapter III he describes a simple and practical method of getting rid of the slop water from an ordinary suburban house. Whether the filtering device, shown on page 82, for separating grease and other solids from kitchen waste would work in our severe climate remains to be demonstrated. Dr. Poore's success in draining his own country place and his employment of earth for filtering purposes in urinals is certainly very interesting and might be copied in many small communities or private houses.

His introductory chapter on "Defects in Planning" gives a sectional view of a typical London house, which shows a surpassing number of omissions, particularly in regard to lighting and ventilation. Judging from the diagrams on pages 4 and 5 the English city house is far inferior to the best American dwellings. Such dark, unwarmed halls would hardly be countenanced any more than to allow a butler to sleep in a dingy pantry "among the tea cups and other gear." Dr. Poore's comments on the English building laws, which in some cases are enforced as rigidly in detached suburban houses as in crowded cities, are striking revelations of red tape. On page 104, in speaking of high buildings near the Strand, he says: "I have attended banquets at more than one hostelry in this district where 150 to 200 persons have been fed in a room having no outside windows of any kind." Throughout London the height of the houses has been gradually raised and the open spaces reduced. Even in the dwellings of the rich a ten-foot back yard is an uncommon feature. Is it any wonder that the deaths of children from tuberculosis are greater in London than in any other part of the country?

Formerly when cities were walled fortresses, people crowded into them for protection and were killed in thousands, by epidemics. Now overcrowding is stimulated by the spirit of greed and countenanced by law. The money marts of our great cities threaten to become as unsanitary as the slums, and it is time to call a halt.

Dr. Poore considers that influenza is communicable through the air, as whole households go down with it when once it gains a footing in a dwelling. Nevertheless a very large proportion of London houses are planned so as to "facilitate the exchange of foul air." He especially condemns the average hotel bed room as "hard to beat" and suggests that house builders and architects might learn from ship builders how to economize space and to cleverly design fittings. He mentions hospital "ward kitchens" for twenty patients, which are three times as large as an ocean steamer galley, where food for two hundred persons is prepared.

Dr. Poore shows that lofty rooms are not desirable unless the windows reach close to the ceiling so as to prevent the upper strata of air from stagnating Windows should open from the top, and too many curtains, wall hangings, etc., which absorb dust, shut out light, and hinder the free circulation of air are objectionable. In hotels as in hospitals facility for cleaning is essential, and too many draperies, carpets and furniture are not desirable.

A high house entails great labor on servants. To climb from the basement to the top floor of a four-story dwelling is equivalent to walking 1,000 feet (five city blocks) on a level, and when one is laden with coal or other household supplies the effort is very exhausting. It is no wonder that domestic servants look so pale and sickly.

New York City. CHAS. F. WINGATE.

FRANCHISES AND TAXATION IN CHICAGO.

Ninth Biennial Report of the Bureau of Labor Statistics of Illinois—Franchises and Taxation, 1896. 8 vo., pp. 320.

The Ninth Biennial Report, like its predecessor, deals only with affairs in Chicago. It treats of the following subjects: Part I, The Transportation and Telephone Companies, pages 1–123; Part II, Taxation in the Downtown District, pages 123–238; Part III, Gas Companies, pages 289–320.

It is very hard in any case to characterize in a few words a book touching so many vital interests in the life of a great city as the present one does. The task is doubly difficult in this particular instance, because Part II is a reprint and analysis of the Report of Mayor Swift's Tax Commission, which has now been before the public for about eighteen months, while Parts I and III became widely known and the subject of bitter controversy before they were published officially. For these two parts were printed in advance, and used as campaign documents against the companies concerned by "the committee of one hundred," organized to oppose legislation promoted by the companies at the last session of the legislature. Indeed, there is some reason to believe that the investigations were undertaken by the Bureau at this time with such an application of the results in view. This is not the place to discuss the propriety or desirability of a scientific bureau undertaking the investigation of a matter which has already become the subject of active legislative consideration or dispute. The danger of using a scientific department to back up or further any pending reform measures, however urgent the particular need of reform may be, is apparent. For it goes without saying that in any such case the private or political interests against which the reform is aimed will attempt to disparage the non-partisan and scientific standing of such bureau or department in the popular mind. Usually such an attempt is not in vain. Especially is this true in such cases as the present, where the interests attacked were temporarily successful in getting about all they asked for from the Legislature. This is likely to seem to the public a vindication of the truth of the claims set up in opposition to the results of the official investigation.

Chapter I of the Report gives an historical sketch of the development of cities from the remotest times, and closes with the arguments for and against the public ownership and management of enterprises such as those under consideration. The part dealing with the transportation companies takes up each company separately and attempts to ascertain the actual cost, the capitalization, the market value and the cost of duplicating the present plant. The capitalization of all the companies, surface and elevated, is placed at $187,300,000, and the mileage at about 700 for the surface roads, and 44 for the elevated roads. The cost of duplicating the three great surface systems is placed at $80,000,000, and the market value of the same at $90,000,000.

Perhaps the portion dealing with the subject of taxation rests on a more solid basis of ascertained fact, as the material for such a study is of a more public nature, and much more available than that in regard to the private corporations. It is interesting to note the almost complete identity of the results of the original investigations by this bureau, as published in the Eighth Report, and those of the Mayor's Tax Commission. The combined results of these two independent investigations confirm substantially all the rumors, now so common, as to wholesale discriminations in assessments of property for purposes of taxation.

The percentages of assessed valuation to real values under a law requiring all property to be assessed at its "fair cash value" are: For property in the business district,

about 9.67; for choice residence property, about 7.78; for unimproved lands, abou 4.88; for cheap residence property, about 15.90; for the three largest gas companies, about 2.99; for the property of the three great street railway companies, about 3.23; and for property in the portions of the State outside of Cook County (Chicago), about 25 to 35.

Chapter IV, entitled, "Conclusions and Remedies" [in regard to franchises], shows the leaning of the report towards public ownership, but the advocacy of such ownership is in very measured terms.

The portion in regard to the gas companies is very much the best available treatment of this interesting and important industry in Chicago. Many of the more important original documents bearing on the subject, such as special charters, city ordinances, trust agreements and court decrees are reproduced in full. From these the main features of the situation may be readily distinguished. It appears that seven companies maintain an illegal trust, bonds to the amount of 26.8 million dollars, bearing on the average about 5½ per cent. interest, and trust certificates to the amount of 25 million dollars. The average market value of these certificates for the last year is placed at about 15 million dollars.

The estimated cost of building these plants is placed at about 17 million dollars. But, in the language of the report, "In other words, all the stock and one-half of the bonds represent no cash investment over and above depreciation." It is maintained that "all charges for gas above fifty cents, and possibly above forty-five cents, are profit." The average selling price is about one dollar.

Whatever may be thought of the correctness of the particular estimates of the report, enough of indisputable evidence is introduced to show that prices are high and capitalization excessive, and that the city makes virtually no efforts, even under the above conditions, to enforce the other obligations of the companies. This is apparent from the confessions of the gas inspector to be found on page 311.

On the whole, the report, which was prepared by Professor E. W. Bemis as the expert of the Bureau, is an important addition to the material for the study of the great questions dealt with. It lays needed emphasis on many things already known, and brings much new material to light.

Many of the appendices referred to in the body of the report are not printed, and no explanation is given. The omission is very regrettable. Possibly the true explanation is to be found in the fact that between the completion and the printing of the report a new State Administration came into power. It is not at all impossible that the attitude of the new administration to these questions had something to do with the omissions as well as with the unusual delay in publishing the report. This supposition gains color from the fact that this administration, pending the publication, supported legislation in direct opposition to the conclusions of the report.

Northwestern University. JOHN H. GRAY.

NEW YORK STATE AND CITY.

A Political Primer of New York State and City. By Adele M. Fielde. New York, The Macmillan Co., 1897, 12mo., 100 pp. 75 cents.

The task of writing a book upon civics that shall not only instruct but also interest is extremely difficult. If the preparation of a text-book for use in high schools and academies is the object, certain limitations at once appear. Knowledge of government is slight, and hence it is with difficulty that interest is aroused. The student does not

expect to earn his livelihood through politics or to secure a governmental position. Consequently, the hope of pecuniary reward does not inspire him. The nature of the study makes it difficult to apply the labratory method, which is so successfully used to arouse interest in other sciences. Various other devices may be resorted to, but it still remains true that the preparation of a text-book and the teaching of civics present many difficult problems.

When the preparation of a book to interest and instruct those outside the walls of the school-room is undertaken, other difficulties appear. The subject matter must be presented in such a way as to attract those who are naturally but slightly interested in government, and once having secured their attention, to keep it. Yet to arouse an interest is not the only purpose; instruction is equally important. And it is necessary for one constantly to be upon his guard that in his efforts to achieve one purpose he does not get so far astray as to wholly interest and not instruct, or wholly instruct without attracting persons to the study. The limitless amount of material at hand makes the selection of the more important items a serious task. What may seem important to one is often regarded as entirely trivial by another, and seldom do any two persons agree.

Without considering longer the difficulties confronting the author, we pass to ascertain how well Miss Fielde has accomplished her purpose. There being no introduction, I assume that the book aims to be what its title indicates, namely, a political primer. The method adopted is that of asking questions and then answering them. No chapter headings break the continuity of treatment, but each new topic is skillfully introduced by a question which connects what precedes with what follows. To facilitate the finding of all statements regarding a given subject, a quite elaborate table of contents is given. Many maps explain clearly the text and are indeed very helpful and valuable. With the substance of the book some fault might be found, but upon the whole, I am inclined to think that the material has been well selected. One may easily point out quite important facts omitted, but it must be remembered that the book is only "A Primer," and accepting the limitations imposed by the author, it must be said that Miss Fielde has shown quite good judgment. She has arranged her well-selected material in an orderly manner, and the facts are interestingly stated. The indifferent student will be attracted rather than repelled.

But while Miss Fielde has been so successful in these lines, she has woefully failed in more important things. It is necessary in a small book, such as Miss Fielde's, to state general conditions merely. The details must be left to other authors and to other times. Now, everyone knows that political institutions are never homogenous. Economic and social institutions vary, and hence political institutions are not entirely harmonious. But with these facts in mind, it must be said that Miss Fielde's book is very weak in stating correctly general relations. Hastily glancing through the book, I find over thirty mistakes in the one hundred small pages, and these are mistakes which could have been avoided without increasing the size of the book or detracting from the interesting way in which it is written.

Upon pages 39 and 40, the composition of borough boards (under the new charter) is described, but no borough boards exist. Courts of Special Session and City Magistrates' Courts (pp. 64-68) are entirely confounded, with the result that many misstatements are made. It is also very questionable whether it is sufficiently correct to say that, "The ordinary outlay of the Government is from three to four hundred millions a year, obtained mainly from the tariff on imported goods." It is also hardly possible to overlook the statement that "The Vice-President is elected in precisely the same

manner as is the President," after half a page has just been spent in explaining the method by which a President is chosen when the Electoral College fails to elect. "Precisely the same manner" is unpardonable if truth is the first thing to be taught. "Each party nominates, by a majority vote in its own National Convention, its candidate for the Presidency and Vice-Presidency," may convey the correct idea to some minds, but Democrats will be inclined to take an exception to its strict application.

Other examples of equally palpable errors might be given, but these suffice to show that Miss Fielde's primer is hardly to be trusted when facts are desired, which is, I take it, a rather important defect. In short the utility of the book is marred by its inaccuracies that are excusable only upon the ground of negligence. And such negligence as will permit over thirty mistakes to appear in a small book of 100 pages should receive the severest criticism. An author can hardly hope to instruct others successfully when he himself misstates the facts. It is to be hoped, however, that a new edition will soon be issued, in which the mistakes will be rectified, for the book contains much that is commendable, and much that is—the reverse.

New York City. MILO R. MALTBIE.

LEADING ARTICLES UPON MUNICIPAL ADMINISTRATION AND CITY CONDITIONS.

SEPTEMBER—DECEMBER, 1897.

PECULIARITIES OF AMERICAN MUNICIPAL GOVERNMENT.

The November number of the *Atlantic Monthly* contains an interesting and suggestive article by Editor E. L. Godkin of the New York *Evening Post*, entitled "The Peculiarities of American Municipal Government." Mr. Godkin has gone so thoroughly into the discussion of the subject that it seems wise to give a number of excerpts from this most comprehensive paper, for much that is said will probably invite criticism and discussion.

Speaking of the municipal history of American and European cities, Mr. Godkin says: "In Europe, as a general rule, municipalities either existed before the state or grew up in spite of the state," while "American cities, on the contrary, are without exception the creations of a state; they have grown up either under state supervision or through state instigation; that is, they own their origin and constitution to the government." One may question the truth of such a statement, yet it is true to some extent and undoubtedly explains to some slight degree the lack of legislative interference in Europe.

The Tweed fiasco is declared to be "simply the complete breakdown of this old plan of managing the affairs of the city through the legislature. * * * City government, it was seen, is in some sense a business enterprise, and must be carried out either by the kind of men one would make directors of a bank or trustees of an estate, or else by highly trained officials." The reasons why neither of these methods has held sway are pointed out; the development of the spoils system and responsibility to party are briefly traced and the reasons that these notions found readier acceptance in cities than elsewhere are shown. The result was the evolution of the "boss," and Mr. Godkin affirms, that "In not one [American city], until our own time, has there been even a pretense of non-partisanship; that is, the filling of the offices solely with a view to efficiency in the discharge of their duties." The tendencies of our system of party government are "to consider the interests of the organization as paramount to those of the city at large," and to support the party "even when it makes mistakes, right or wrong, no matter how much we may condemn its policy or its acts, on the ground that it is made up of better material than the other party. But in the cities still another advance has been made, and the parties have really been separated from politics altogether, and treated, without disguise, as competitors for the disposal of a certain number of offices and the handling of a certain amount of money. Consequently nearly all discussions of city affairs are discussions about places."

"In addition to reliance on change of parties for the improvement of city govern-

ment, much dependence has been placed on the old American theory that when things get very bad, sufficient popular indignation will be roused to put an end to them"; but there are many objections to this scheme of reform. It is remedial, not preventive. "The popular conscience has to be shocked by striking disregard of the tests established by popular usage, incompetence or corruption in the work of administration being rarely visible to the public eye," and the masses are not apt to believe better administration can be had until the work is accomplished.

Mr. Godkin then states in a few words the importance of civil service reform and asserts that "one effect, and a marked one, too, of this withdrawal [of patronage produced by civil service reform] has been the introduction of the practice of levying blackmail on corporations, nominally for political purposes." After showing the nature, extent and difficulties of overturning the system of blackmail, the various means of securing good city government are considered. "The earliest remedy,—the substitution of one party in the city government for another,—which has been employed steadily by each party for the last half century with singular acquiescence on the part of the public, has been to some degree supplanted, since the war, by another, namely, the modification of the charter, so as to secure greater concentration of power in few hands. Nearly every change in charters has armed the mayor with more jurisdiction." Mr. Godkin is evidently opposed to this remedy and sees in it the same tendency that "the disposition to combine several small concerns into one large one, to consolidate corporations, and to convert private partnerships into companies," manifests, viz., the desire "to escape the responsibility of direction." The plan does not remove legislative control, and special legislation will continue as before, an evil which Mr. Godkin believes (and rightly, too), ought to be removed at once.

A number of pages are devoted to showing why the legislatures are unwilling to relinquish their control, among which are: "The accumulation of wealth in the cities as compared to the country. City life they consider marked throughout by gross extravagance. The farmer finds it very difficult to place a high value on labor which is not done with the hands and does not involve exposure to weather. It leads to agricultural distrust of urban views on finance, and produces in country districts a deep impression of city recklessness and greed. The urban man has been an object of slight dislike or jealousy to the countryman. Cities, too, have always been to the countryman resorts of vice of one sort or another, and all that he hears of the temptations of city life fills him with a sense of his own moral superiority. It has been very natural, therefore, that in America, in which the country has had the power before the city, and not, as in Europe, the city before the country, the country should have tried with peculiar care to retain its free domination over the city. This process has been made easy not only by the fact that the city was generally created by the state, but by our practice of selecting our state capitals, not for judicial, or commercial, or historical, but for topographical considerations. The present arrangement has proved unfortunate in two ways: it has helped to confirm the rural mind in a belief in the inferiority and insignificance of cities as compared to the country."

As to the internal organization of the city, Mr. Godkin favors simplification, but adds: "Finding that it [the charter] does not work well, we seek a remedy by making a change in its provisions rather than in the men who administer it. In this way our municipal woes are perpetuated, and we continue to write and talk of charters, as if they were self-acting machines instead of certain ways of doing business. No municipal reform will last long or prove efficient without a strong and healthy public spirit behind it. With this almost any charter would prove efficient."

THE STREET RAILWAY SITUATION IN CHICAGO.

Professor John H. Gray, of Northwestern University, briefly summarizes in the October number of *The Quarterly Journal of Economics* the legislation passed by the Illinois State Legislatures since 1859, relating to street railways. Incidentally he states that "The three great companies, the Chicago City Railway, the North Chicago Street Railway, and the West Chicago Street Railway (under several slight changes of name), operating in the south, north and west divisions of the city respectively, have about 487 miles of road. The ten minor companies have about 231 miles, chiefly in the outskirts and suburbs of the city, making in all more than 700 miles of surface road. In addition, there are five elevated roads, with 44 miles. Since, however, the three great surface roads reaching the downtown district control the situation (including the elevated roads), we may dismiss the other roads with the single remark that, although in some cases they are in nominal opposition to the great companies, any legislation favorable to the latter would ultimately be also advantageous to the former, as it would enable them to make better terms when the inevitable consolidation came." It might also be added that consolidation (perhaps co-operation would be a better word) is not so distant as one might imagine from the number of existing companies, for a few persons now own large portions of the stock of all the larger companies, and hence dictate very largely what their policies shall be.

The provisions of the "Allen-Humphrey" bill passed last session are succinctly stated in these words: "The bill, as it received the Governor's signature, allows the local authorities to grant locations to street-car companies for fifty years; but no such grant shall be made to new roads except upon the petition of a majority in interest of the owners of the abutting property along each mile and additional fraction of a mile of the proposed route. There are some curious, vague and perhaps unconstitutional provisions in regard to revocations of signatures to such petitions. The petition of such property owners is not required for the renewing of ordinances already granted for the laying of tracks. In the case of the extension or renewal of any ordinance now in force, the fare must be five cents during the first twenty years, provided that in no case shall the fare be fixed in future by the local authorities for a longer period than twenty years. In any future new ordinances the local authorities may fix the rate of fare; but, when once fixed, such fare cannot be lessened by ordinance for twenty years. Consolidation on exactly the lines laid down in the original Humphrey bills is authorized. The carriage of mail is authorized, but not that of packages. The act is not so favorable to the companies as the defeated bills, and it has some desirable provisions. Whether it gives the companies the fixity of tenure and the assured monopoly which they hoped for is not certain. Appeals both to the city council and to the legislature are probable, especially as under its terms action on the part of the former is needed. For the present it stands as the outcome of the heated contest of the session"

The conclusion that as yet the relations of the state and the municipality to private corporations controlling municipal monopolies have not been satisfactorily worked out is readily apparent in all Professor Gray says. Legislative intervention has aided, if not caused, the endless confusion that exists. No one, not even the corporations themselves, know what is their exact position in law. "Home rule" is made to mean total exclusion of state interference, yet at the same time the legislature is appealed to for the enactment of a new charter which would specify more in detail how the city shall conduct its affairs. Evidently, there is no definite idea in Illinois as to what position the city occupies in our political system, and the same is true of most of the states.

THE NEW YORK POLICE.

Hon. Theodore Roosevelt contributes an interesting article to the October number of the *Century Magazine* under the title, "The Roll of Honor of the New York Police."

The purpose of the New York Police Board appointed by Mayor Strong in 1895, was to "take the force out of politics"—at least we may say that it was the purpose of two members of the Board. But it was realized that a police organization may be "free from the taint of corruption" and still show itself unable to deal with the more dangerous kinds of criminals. Honesty is not always combined with efficiency. Each may exist without the other.

When the attempt was made to divorce the police department from politics, it became necessary to institute a new standard for promotions. Party affiliation could no longer be retained as the true basis of reward. Recognizing that the ideal policeman is one who possesses courage, personal daring, presence of mind and resolution, the Board decided to recognize these qualifications as important factors in determining promotions. As Mr. Roosevelt says: "Mere courage and daring, and the rewarding of courage and daring, could not supply the lack of discipline, of ability, of honesty; but they are of vital consequence, nevertheless. No police force is worth anything if its members are not intelligent and honest; but neither is it worth anything unless its members are brave, hardy and well disciplined."

"We showed recognition of daring and personal prowess in two ways: first, by awarding a medal or a certificate in remembrance of the deed; and, second, by giving it weight in making any promotion, especially to the lower grades. In all promotions, above that of sergeant, for instance, resolute and daring courage cannot normally be considered as a factor of determining weight in making promotions; rather it is a quality, the lack of which unfits a man for promotion; for in the higher places we must assume the existence of such a quality in any fit candidate, and must make the promotion with a view to the man's energy, executive capacity, and power of command. In the lower grades, however, marked gallantry should always be taken into account in deciding among different candidates for any given place, and wherever possible, should be made the determining consideration."

Mr. Roosevelt then proceeds to give instances in which members of the force acted as genuine heroes rather than as cowards or oppressors of the weak and unfortunate—misrepresentations that are all too frequent. Many agree with Mr. Roosevelt when he says: "I doubt if the average citizen, especially the average stay-at-home citizen, realizes how often the man of the night-stick is called upon to display qualities which in a soldier would be called heroic. His feats in saving life or in arresting dangerous criminals, alone and at night, attract no special attention when mentioned in the newspapers; but they often imply just as much courage as those of the man who captures an enemy's flag in battle, or plants his own flag on a hostile parapet. The men of the New York police force represent all the different creeds and different race origins that go to the make-up of our stock; but they all become good Americans who pay no heed to differences of creed and race, for otherwise they would be useless. The police occupy positions of great importance. They not merely preserve order, the first essential of both liberty and civilization, but to a large portion of our population they stand as the embodiment as well as the representative of the law of the land. To the average dweller in a tenement-house district, especially if born abroad, the policeman is in his own person all that there is of government; he is judge, executive and legislature, constitution and town meeting. His power and influence are great. For any vice or shortcom-

ing he should be sternly punished, but for gallantry and good conduct he should receive prompt and generous recognition."

MUNICIPAL LIFE IN NEW ZEALAND.

From the far-away isle of New Zealand there appears in the October number of *The Open Court*, an article entitled "Municipal Life in New Zealand," by Sir Robert Stout.

From the description given one easily sees that there is much resemblance between English borough government and the municipal institutions of New Zealand, although many dissimilarities appear as well. Three kinds of local government exist—"the borough and the city, the road district, and the county. The borough and city system is for centres of population; the county for country districts, and road districts are part of counties, and only in force in some special districts. * * * The franchise is uniform throughout all the boroughs and cities. All occupiers of land or houses are, if they are owners, and if tenants, if their tenancy is at least a six months' tenancy, entitled to be enrolled as burgesses or citizens, and they alone of the inhabitants have the right to vote. Every borough, and hereafter I include in a borough the cities, has a council consisting of a mayor and councillors. * * * The number of councillors varies from six to eighteen."

"In electing a mayor, each burgess has but one vote, but when councillors are being voted for, plural voting is permitted, the number of votes varying from one to five according to the amount of property owned. The functions of a borough are classified as follows: (1) Construction of roads and streets; (2) lighting the streets; (3) providing water for the people; (4) general municipal improvements (including sewage, sanitary arrangements, etc.); (5) management of recreation and other reserves; (6) fire brigades. Neither the boroughs nor counties have any control of the police. They are under the central, general, or colonial government. Education also is not under the boroughs or counties."

The ordinary revenues consist principally of rates, license fees and rents from reserves. "Then some boroughs own gasworks and make a profit in selling gas to the citizens. Others own the waterworks that supply the borough with water, and for that supply a special rate is charged. * * * The boroughs own the cemeteries and there is a profit made out of the sale of burial lots."

The remainder of the article is chiefly devoted to a description of the governmental system of two cities—Dunedin and Wellington, which have a population of 22,000 and 37,000 respectively.

MUNICIPAL RESTAURANT OF GRENOBLE, FRANCE.

The September *Bulletin of the Department of Labor* contains a brief but interesting description of the "Municipal or Co-operative Restaurant of Grenoble, France," by C. Osborne Ward.

The actual working of the enterprise is shown, and the difficulties met and overcome are clearly stated. It is really a municipal restaurant which undertakes to furnish food and meals at cost. The co-operative features are very slight. Membership may be obtained upon a payment of 20 cents but the advantages of being a member are not very many, for the prices are the same to members or non-members. As Mr. Ward says, "No profits are awarded any person or institution, but the municipality of Grenoble receives a nominal rental for the property's use. The city and the members receiving

no profit in any form, the incentive to speculation is entirely ruled out. In order that the prices of the dishes may be reduced to an unalterable minimum, it is provided that if at the close of the year a surplus has accrued it shall be deposited in the city's treasury as a reserve for other years when prices of provisions are high." The prices and quantity of food are as follows:

	Cents.
Soup, 1 quart	2
Meat or fish, 4 1/2 ounces	4
Plate of vegetables	2
Wine, 1/2 pint	2
Bread, 4 2/8 ounces	1
Dessert	2

"There are different varieties of soups, meats, vegetables, dessert, etc., which the patron specifies as he presents the checks at the wicket of the kitchen, whither he proceeds on his way to one of the eating rooms. His soup check, for instance, calls for four varieties of soup, from which he can make a choice. His check for meat is good for either a beefsteak, a roast, a cutlet, or other meats. So with the other checks. Exception must be mentioned of wine, only one quality being handled. This is red wine, stored according to law for about two years in the wine cellar, and absolutely pure. The check for dessert is good for nuts, sweetmeats, several kinds of cheese, etc."

"Although the original object in the formation of this institution was to improve the condition of the working people, who to this day are its most numerous customers, yet numbers of wealthy glove and silk manufacturers, as well as clergymen and merchants, are constant in their practical patronage as well as their praise." As to the prices paid for the raw material, Mr. Ward says, that the farmers "unanimously reported that wherever the influence of the establishment is felt it is regarded as beneficial, not so much on account of the higher prices it may offer as on account of its permanency and business integrity and the high moral standard that it sets."

The people are very much adverse to considering the restaurant a municipal institution because of their strong opposition to public ownership and control of industries, but they seem to see that the enterprise is a success.

WASHINGTON CITY GOVERNMENT.

The September issue of the *Political Science Quarterly* contains a brief but interesting description of "Washington City Government," by Mr. C. Meriwether. After stating the principal facts in the history of the city, in which the failure of popular government is strikingly brought out, Mr. Meriwether proceeds to outline the present system, which was established in 1878.

"All the usual powers of a municipal corporation are lodged in the hands of three commissioners, appointed for a term of three years at a salary of $5,000 each. Two of them are nominated from civil life by the President of the United States and confirmed by the Senate, the chief qualification being that they shall be citizens of the United States and 'actual residents' of the District of Columbia for the three years next preceding their appointment. The third commissioner is assigned to exclusive duty by the President from the engineer corps of the army. These three men are the official head of the corporation of the District of Columbia. They are endowed with the control of

appointment and removal over practically all the executive officers in the District. Through their wide powers of regulation in police, health and other matters they come very near the line of legislative functions. They are organized as a board with one of their number chosen by themselves as president, to transact business by a majority vote. For the dispatch of routine matters they parcel out the duties among themselves, each being considered supreme in his own domain, subject, of course, to the decision of the board. There is no legal or permanent division, though the army officer commonly has charge of those details that pertain to the engineering department of a city."

Mr. Meriwether then shows how the system is kept from becoming bureaucratic, and the commissioners haughty and arrogant. The feeling of responsibility on the part of the President, the great opposition that is aroused when an inferior person is chosen, the vigilance of the citizens and their willingness to file complaints, and the sensitiveness of both Houses of Congress to public opinion are the important factors. The result of this system is that "the political gamester who so often climbs by trickery and intrigue to the mayor's chair in our largest cities, is an utter impossibility in Washington. * * * In the conduct of business the commissioners are more approachable than the average American mayor. Patience and courtesy are shown to the humblest; no 'pull' or introduction is necessary."

"The justification for the peculiar mechanism of municipal government in Washington is readily found in the peculiar character of the city and of its population. The city is really 'a big government reservation,' and has to be treated as such. It is a resort for the idle and shiftless, a paradise for negroes, a Mecca for tourists, at the same time a growing center of fashion and culture, and withal, despite civil service reform, a vast hotel for transient office seekers. The conjunction of such discordant elements makes popular government 'a priori' absurd."

But when the citizens found they were excluded from active participation in the city government, they proceeded to form citizens' associations for the purpose of making their needs and desires more distinctly felt. The principal association is the Board of Trade, organized in 1889. "The names of nearly all the leading residents in professional and business life are on its membership list, which aggregates over five hundred, and includes two of the District commissioners, with other municipal officials. As many of its members are actively connected with the smaller associations, it is fairly representative of the whole District. It has over twenty standing committees, including those on bridges, parks and reservations, public buildings, public health, public library, public schools, railroads, river and harbor improvement, legislation, sewerage, streets and avenues, and water supply."

"The value of these associations is freely conceded by all, and the papers give full reports of all their doings. The District commissioners cheerfully acknowledge indebtedness to them for sound suggestions and useful information. The members of Congress rely on the genuineness and disinterestedness of their motives. A senator considered it ample recommendation for a bill that it had been endorsed by the Board of Trade. The Hon. William L. Wilson, during his services as Democratic leader in the Lower House, gave the fullest recognition to the work of these spontaneous organizations of the people. Through their activity, in fact, municipal government in Washington has assumed in operation a very different form from that contemplated in its organization. By law, the system is a benevolent despotism; in practice, it is a representative aristocracy."

HISTORIC NEW YORK.

The City History Club has continued its exceedingly valuable work of publishing

brief articles upon important phases of the city's history. The subjects of the papers recently issued in the *Half Moon Series* are:

"Old Greenwich," by Elizabeth Bisland.

"Old Wells and Water Courses of the Island of Manhattan," Parts I and II, by George Everett Hill and George E. Waring, Jr.

"The Bowery" by Edward Ringwood Hewitt and Mary Ashley Hewitt.

With January, the second series begins and will contain:

"Slavery in Old New York," by V. Edwin Morgan.
"Tammany Hall," by Talcott Williams.
"Family Names and Their Origin," by Berthold Fernow.
"Bowling Green," by Spencer Trask.
"Old Prisons," by Elizabeth Dike Lewis.
"Brenkelin," by Harrington Putnam.
"Old Taverns and Posting Inns," by Elizabeth Brown Cutting.
"Earley Schools," by Edith Putnam.

The excellent work done by the City History Club should receive universal support. No one work contains such valuable and interesting information regarding the history of New York, so well arranged and so entertainingly written as these papers present. The efforts put forward to arouse interest in the city, to preserve historic documents and places, and to inculcate a broader knowledge of present institutions deserve great success.

THE ITALIANS IN CHICAGO.

The November *Bulletin of the Department of Labor* contains a social and economic study of "The Italians in Chicago," which is the Ninth Special Report of the Commissioner of Labor. This report is declared to be "the result of an investigation commenced in April, 1896, by an agent of the Department, into the social and economic condition of Italian families residing in the slum districts of Chicago. In all, 1,848 families of this character were visited and information secured for the 6,773 persons embraced therein. Of this number 4,493 were born in Italy. According to the United States census of 1890 there were 5,685 persons of Italian birth in the city of Chicago at that time."

The facts gathered are classified and analyzed in order to show the general social and economic condition, the general condition as to literacy and illiteracy, school attendance, conjugal condition, place of birth, number and size of families, nativity of parents, relationship to head of family, foreign-born voters and aliens, weekly earnings and hours of work, persons unemployed by months unemployed, literates and illiterates by sex, age periods and degree of illiteracy, school attendance, condition of all children from five to fourteen years of age, persons sick or physically defective, etc., etc.

It would be utterly impossible to give in a few paragraphs a short *resumé* of the statistics gathered. A few excerpts must suffice:

"The inquiry, Do you work for a padrone? was asked of 1,860 persons connected with these families, and 403, or 21.67 per cent., answered in the affirmative. Of this number, 24, or 5.96 per cent., reported that they paid no commission to the padrone for securing the job, while 379, or 94.04 per cent. reported that they paid a commission. It was not found possible to ascertain the amount of commission paid by each of these 379

persons, but quite a large proportion of them were able to report the exact amount of commission paid for their last job, and the length of time said job lasted. An aggregate of $1,650.50 was paid to padrones by the 341 persons reporting, or an average of $4.84 per individual, for the last job at which they worked, and the aggregate time worked on these jobs was 3,958 ½ weeks, or an average of 11 weeks and 4 days per individual. The average amount paid per week to padrones for employment at the last job at which 341 persons worked, as shown by these figures, was 42 cents each. This commission to padrones is a matter of no small moment to the workmen when the very low wages at which they work is taken into consideration."

"The prices charged by padrones [for food] are frequently double those charged in Chicago markets for similar articles of food of the same quality. Considering each article embraced in the table, and all combined, it is seen that the padrone's prices show an average increase over Chicago prices as follows: For bread, 82.19 per cent.; for macaroni by the pound, 61.11 per cent.; for macaroni by the box, 50.33 per cent.; for cheese, 46.02 per cent.; for sausage, 72.40 per cent.; for bacon, 67.91 per cent." etc.

FREE ORGAN RECITALS IN BOSTON.

In the *American Monthly Review of Reviews* for November, Mr. William I. Cole describes an experiment tried in Boston last winter with so great success as to merit attention in other cities.

We all know, if we but stop to think, that in every city "There are numerous churches, many of which seldom or never are opened between Sundays. An equal number of organs are silent a greater part of the week. A body of trained organists has but an extremely limited constituency for their art. On the other hand, there is a music-loving public whose opportunities for hearing good music of any kind were in countless cases too few, and for hearing organ music outside the church service are, in the case of all, very rare."

These facts impressed themselves upon several aggressive, optimistic persons in Boston who came to believe that here was an opportunity of doing much practical good. At first church authorities and musicians were skeptical and predicted failure. They declared: "That the public cared little for organ music and would not come to hear it." Nevertheless, the work went on, and with what success is told by Mr. Cole in these words: "From the outset the attendance was astonishingly great. About four hundred at the first recital, it increased to eighteen hundred at the second, of which four hundred to five hundred were turned away. The average attendance for the whole twenty-two concerts was not far from eleven hundred. This result in point of numbers will appear the more surprising when it is known that the gentleman to whose energy, thorough musicianship, and rare personality the success of the enterprise was very largely due, had declared that if two hundred and fifty came he would feel well repaid for all that he had done. The evening audiences were of a more distinctly popular character than the noon audiences, and contained a larger proportion of men. As would be expected, the downtown recitals brought together the greater number of clerks and shop-girls. A few people came to the recitals in carriages."

The article relates in detail the methods adopted for overcoming what seemed to be insurmountable difficulties, and all considering the inauguration of similar plans in other cities will find here valuable suggestions.

IS CITY GOVERNMENT BUSINESS OR POLITICS?

The maxim that, "Municipal government is business, not politics," has been quoted

more frequently of late than any other political epigram. Non-partisans have long sought for a justification of their methods, and when this shibboleth was proclaimed, they eagerly grasped it as conclusive theory. The October number of *Gunton's Magazine* contains a refutation of this idea in the article entitled: "Theory and Practice of Non-partisanship," presumably from Mr. Gunton's pen. Mr. Gunton finds his ammunition in the similarity between national and state, and city government, and in the actions of the non-partisans themselves. As to whether "Municipal government is business, not politics," Mr. Gunton says: "If there is any truth in this, it means that the government of Greater New York, and for that matter, any other municipal body does not involve any principle of public policy; that it is simply a sort of shop-keeping affair, in which the duty of the Mayor is simply to see that everybody attends to his business, doesn't loaf in working hours and honestly accounts for the expenditure of the revenues collected from the public."

"Shorn of all subterfuge, the logic of this is that municipal government should be entrusted to the management of an ideal boss, who should be above and independent of all political influences, and whose ideas regarding public policy should be unquestioned; in short, that he should be a person superior to and beyond the reach of any political party, which means substituting personal for representative government. * * * Upon this theory it is of no importance whatever whether the candidate for Mayor is a Democrat, a Silverite, a Single Taxer, Socalist, Populist, or Republican; all that is needed is that he is an efficient, honest man who will see that efficient, honest men are appointed in the different departments to do city's works."

"Under popular government the idea of non-political government of communities is an absurdity. Good city, state and national government everywhere rests on sound ideas of public policy, and not on accuracy of bookkeeping, or the mere personal integrity or attractiveness of the chief executive officer. * * * Who will pretend that a mere negative shopkeeper or merchant, who can be trusted for honesty and efficiency in the spending of public means, is the highest type of statesman."

After showing that "individual honesty" and "personal capacity" are "essential characteristics" in a presidential candidate, but still far from being the most important ones, Mr. Gunton points out that the non-partisans themselves outline a legislative policy and prepare a programme for Greater New York. When he proceeds to constructive criticism, Mr Gunton flies to the other extreme and claims municipal questions should determine partially the choice of national affairs. He says: "National parties would then be held responsible not merely for their attitude on the tariff of finance, but also for the attitude of the party towards industrial state legislation and on local questions of education, sanitary improvement, housing of the poor, and all economic and social questions that reach right down into the daily life of the people. * * * If national parties were held responsible for the conduct of their followers down the whole line into the smallest school district, it would become politically necessary for the national leaders to use their influence for wise policy in the most remote local districts. With such a theory and practice of party influence it would be impossible for a President to be popular in Washington, when his party is preventing education and suppressing personal freedom in the South, or using injunctions against strikers and blacklisting and otherwise coercing laborers in the North. If the national party professed to be in favor of personal freedom, it would be held responsible for the attitude of its follows towards personal freedom, just as much in the remote localities as on the floor of Congress. If the national party professed to favor social improvement, it would then be held responsible as much for good municipal government as for wise tariff laws. Under this view of party responsibility, the national

Democratic party would have been held responsible for Tammany's conduct of New York City government during the last twenty years."

"In reality, the theory of non-partisan administration of public affairs is a false doctrine of a Pharisee movement. It is the plea of the sophist, a doctrine of disorganization, and is contrary to the whole history and spirit of representative government and democratic institutions. The very essence of popular government is representation, and the most efficient, conservative and permanent method of securing adequate representation is through the medium of organized parties. A movement, whose object is to divorce the selection of public officers from party organizations, and set up mere unrepresentative individuality as superior to selected representatives for public offices, is a movement to undermine the foundation of popular government."

BIBLIOGRAPHICAL INDEX.

September–December, 1897.

(NOTE.—The following subject index is intended to continue the work begun in the first (March issue of MUNICIPAL AFFAIRS, which was entirely devoted to a Bibliography of Municipal Administration and City Conditions. In the June and September numbers, the index was made complete to September 1st. So far as possible all books, pamphlets and magazine articles of interest to students of city government which have appeared during the last three months (September-December, 1897) are included in the following list. Future numbers of MUNICIPAL AFFAIRS will contain similar indices covering the literature of each preceding quarter.)

BRITISH AND AMERICAN PERIODICALS.

ALTRUIST, New York.....Altruist.
AMERICAN ARCHITECT, Boston.....Am. Arch.
AMERICAN ECCLESIASTICAL REVIEW, New York.....Am. Ecc. R.
AMERICAN ECONOMIC ASSOCIATION PUBLICATIONS, New York.....Am. Econ. Assoc.
AMERICAN FEDERATIONIST, Washington.....Am Fed.
AMERICAN GAS LIGHT JOURNAL, New York.....Am. Gas Light J.
AMERICAN HISTORICAL REGISTER.....Am. Hist. Reg.
AMERICAN HISTORICAL REVIEW, New York.....Am. Hist. R.
AMERICAN JOURNAL OF SOCIOLOGY, Chicago.....Am. J. Sociol.
AMERICAN LAW REVIEW, St. Louis, Mo.....Am. Law R.
AMERICAN MONTHLY REVIEW OF REVIEWS, New York.....Am. Mo. R. of Rs.
AMERICAN STATISTICAL ASSOCIATION PUBLICATIONS, Boston.....Am. Statis. Assoc.
ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE, Philadelphia.....Ann. Am. Acad. Pol. Sci.
ARCHITECTURAL RECORD, New York.....Arch. Rec.
ARCHITECTURAL REVIEW, Boston.....Arch. Rev.
ARCHITECTURE AND BUILDING, New York.....Arch. & Buil.
ARENA, Boston.....Arena.
ATLANTIC MONTHLY, Boston.....Atlan.
BANKER'S MAGAZINE, London.....Bank. M. (London.)
BANKER'S MAGAZINE, New York.....Bank. M. (N. Y.)
BIBLIOTHECA SACRA, Oberlin, O.....Bib. Sacra.
BLACKWOOD'S MAGAZINE, Edinburgh.....Blackw.
BULLETIN OF THE DEPARTMENT OF LABOR, Washington.....Bulletin Dept. Labor.
CANADIAN ELECTRICAL NEWS, Toronto.....Can. Elec. N.
CANADIAN MAGAZINE, Toronto.....Canadian M.
CASSELL'S FAMILY MAGAZINE, London.....Cassell's.
CASSIERS' MAGAZINE, New York.....Cassier's.
CENTURY, New York.....Cent.
CHAMBER'S JOURNAL, Edinburgh.....Chamber's.
CHARITIES REVIEW, New York.....Char. R.
CHARITY ORGANIZATION REVIEW, London.....Char. Or. R.
CHAUTAUQUAN, Meadville, Pa.....Chaut.
CITIZEN, THE, Philadelphia.....Citizen.
CITY AND STATE, Philadelphia.....City & State.
CITY GOVERNMENT, New York.....City Govt.
COMMONS, THE, Chicago.....Commons.
COMMONWEALTH, New York.....Commonw.
CONTEMPORARY REVIEW, London.....Contemp.
COSMOPOLITAN, New York.....Cosmopol.
DIAL, Chicago.....Dial.
DIRECT LEGISLATION RECORD, Newark, N. J.....Dir. Leg. Rec.
DUBLIN REVIEW, London.....Dub. R.
ECLECTIC MAGAZINE, New York.....Ecl. M.

Economic Journal, London	Econ. J.
Economic Review, London	Econ. R.
Edinburgh Review, Edinburgh	Ed. R.
Education, Boston	Educa.
Educational Review, London	Educa. R. (London.)
Educational Review, New York	Educa. R. (N. Y.)
Electrical Engineer, New York	Elec. Eng.
Electrical Engineering, New York	Elec. Engng.
Electrical Review, New York	Elec. Rev.
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BIOGRAPHICAL NOTICES

OF THE

WRITERS IN MUNICIPAL AFFAIRS FOR DECEMBER, 1897.

RICHARD ROGERS BOWKER.—Born in Salem, Mass., 1848. Educated in New York public schools and graduated at the College of the City of New York, 1868. Has long been the editor of the *Publishers' Weekly*, the *Library Journal*, the *American Catalogue*, etc., and since 1890 First Vice-President of The Edison Electric Illuminating Company of New York. In 1880–82, lived in London as the representative of Harper & Bros., and has since frequently visited the chief European as well as American cities. His writings, in politics and economics, include "Of Work and Health" (1888); "The Economic Fact Book and Free Traders' Guide" (1885); "Primer for Political Education" (1889); "Civil Service Examinations" (1889); "Electoral Reform" (1890); and "Economics for the People" (1886—5th edition 1896); the "Great American Industries" series in Harper's Magazine; "Political Responsibility of the Individual," Atlantic, September, 1880, and many other magazine and newspaper articles, addresses, etc. Was co-editor with George Iles of "The Readers' Guide in Economic, Political and Social Science" (1891) and of the Campaign Text-Book, National Democratic Party, 1896. Is in politics an Independent, now associated with the National Democratic Party, a civil service reformer, an absolute Free-Trader and a "limited" Land-Taxer. Originated the independent Republican movement of 1879 and has been called the original mugwump. Drafted the original of the first Republican civil service reform plank in the Garfield convention, 1880. Was active in procuring the passage of the first civil service reform bill in the New York Legislature, and was an early advocate of ballot reform. Was an early member of the New York Free-Trade Club and Brooklyn Revenue Reform Club, and was Honorary Secretary of the American Free-Trade League up to the suspension of its work. Resigned with most of the other members of the executive committee from the Brooklyn Young Republican Club in 1884 to take a leading part in the national committee of Republicans and Independents which promoted Mr. Cleveland's election. Was one of the incorporators and on the original Board of Trustees of the Reform Club, started its library and edited the first "Reform Club Rules of Publications," of which the second number was his annotated edition of President Cleveland's message of 1887. Has never held or been a candidate for any public office, though offered a nomination for Congress and proffered by President Cleveland an honorary appointment, but has done much public service in such relations as Vice-President of the American Copyright League, of the Brooklyn Democratic Club, of the National Civic Club of Brooklyn; as a director of the Brooklyn Library and a Trustee of the Brooklyn Institute; as Chairman of the City Lectures Committee in New York; and as a member of Council of the American Library Association, the Authors' Club and the University Settlement Society in New York.

JOHN ROGERS COMMONS.—Born at Hollandburg, Ohio, in 1862. Educated in public schools and graduated at Oberlin College. Studied political science at Johns Hopkins University in 1889–90, receiving the degree of A. M. from Oberlin in 1890. Was

tutor in economics at Wesleyan University, Middletown, Conn., 1890-91; associate professor of political economy at Oberlin in 1891-92; for three years professor of political economy and social science in Indiana University, and since 1895 in Syracuse University. Was one of the founders of the American Proportional Representation League, and was active in the American Institute of Christian Sociology. Belongs to no one school except as holding to the so-called ethical view of political economy. Favors a tariff on products where there is domestic competition, free trade where there is a domestic monopoly, but holds the tariff of minor importance. Favors the nationalization and the municipalization of natural monopolies and the complete government control of currency. Is author of "Distribution of Wealth" (1893); "Social Reform and the Church" (1894), "Proportional Representation" (1896), "State Supervision for Cities," *Annals* (1895), "Taxation in Chicago and Philadelphia," *Journal of Political Economy* (1895), "Day Labor and Contract Systems on Municipal Works," *Yale Review* (1897). Has contributed many articles upon various phases of city government to the leading magazines.

FREDERICK STYMOTZ LAMB.—Born in New York city in 1868. While at college he began the study of art which he continued at the Art Student's League, 1880, working there for two years and going to Paris in 1882. Studied drawing and painting at the Ecole des Beaux Arts, and under M.M. Boulanger and Jules Lefebvre, also sculpture at the Petite Ecole des Beaux Arts, under M. Millett. Returned to New York in 1886. Having become interested in decorative work during his study in Europe, has given himself, since his return, almost exclusively to this field. Is a member and active worker of the Art Students' League, the Architectural League, the National Sculpture Society, the National Society of Mural Painters, and at the present time one of the latter Society's representatives in the Fine Arts Federation. Received for mural work an honorable mention at the World's Exposition, Chicago; a gold medal at the Exposition, Atlanta, Ga., and has been and is engaged upon many important civic and private commissions. Through such work has become especially interested in the development of civic, economic and political questions in which art can unquestionably do much to formulate higher ideals.

FRANK J. GOODNOW.—Born in Brooklyn, New York. Graduated at Amherst College in 1879. In 1882 received the degree of LL.B. from the Columbia College Law School. In the same year was admitted to the bar of the State of New York. In 1883 received a call from Columbia University to the chair of Administrative Law in the School of Political Science, which had been established three years before. Before assuming the duties of this position, went to Europe to study, remaining a year at the École Libre des Sciences Politiques at Paris, and a semester at the University of Berlin. In 1884 began to teach at Columbia University, where he has remained ever since. In 1893 published a work entitled "Comparative Administrative Law;" in 1895, one entitled "Municipal Home Rule;" in 1897 one entitled "Municipal Problems. Has also been one of the Editors of the *Political Science Quarterly*, to which he has contributed numerous articles. In 1895 received the degree of LL.D. from Amherst College.

J. RICHARD FREUD.—Born in New York, November 7th, 1857. At the age of six years came to California. Educated in the public schools of San Francisco and graduated from the University of California in 1876, receiving the degree of A.B. In 1878 established a free library and reading room for the laboring people of the city,

which was succeeded by the present Free Public Library. At the age of twenty-one was elected from the City and County of San Francisco as a delegate to the Constitutional Convention of California, which framed the present Constitution of California. Engaged in mercantile business from 1880 to 1895. Being deeply interested in municipal affairs, joined with a few other merchants in creating the Merchants' Association of San Francisco. In 1894 was admitted to the bar by the Supreme Court of California. At present is the secretary and attorney of the Merchants' Association, and has been actively engaged as secretary of the Citizens' Charter Association in the movement for securing a modern municipal charter for San Francisco. Was appointed by the mayor to the Charter Convention of One Hundred and elected its secretary. Started the monthly *Review*, devoted to civic subjects, and has continued as its editor. Frequently addresses local organizations and occasionally contributes to magazines and newspapers. Prepared an address for the Louisville Conference of the National Municipal League upon "Municipal Affairs in San Francisco." Is now writing a treatise upon "Constitutional Law in California," intended for the legal profession.

GEORGE E. WARING, Jr.—Born in Poundridge, N. Y., July 4th, 1833. Educated at College Hill, Poughkeepsie, and then studied agriculture with James J. Mapes. In 1855 he took charge of Horace Greeley's farm at Chappaqua, N. Y., which he conducted on shares for two years. Appointed drainage engineer of Central Park, New York city, in 1857. Remained in this position four years, during which time he prepared the soil of the Mall and set out the four rows of elms on it. After the opening of the Civil War he was appointed major of the Garibaldi Guard with which he served three months. In August, 1861, he was made major of cavalry by Gen. John C. Fremont. He was commissioned colonel in 1862, and served the remainder of the war in this capacity, chiefly in the southwest. After the war Colonel Waring devoted himself to agriculture and cattle breeding until 1877. Since that time he has been in active practice as an engineer of drainage. He was appointed in June, 1879, expert and special agent of the 10th census of the United States, with charge of the social statistics of cities. He has been a member of the National Board of Health since 1882. During the present administration of the City of New York, Colonel Waring has been Commissioner of Street Cleaning, in which capacity his work is too widely and favorably known to require description here. He has invented numerous sanitary improvements chiefly in connection with the drainage of houses and towns, and has written a number of articles and books on agriculture and sanitation.

FREDERIC W. SPEIRS.—Born at Worcester, August 22, 1867. Received baccalaureate degree from Worcester Polytechnic Institute, 1888. Graduate student in department of history and political economy, Johns Hopkins University, Baltimore, 1888–90 and 1891–92. Professor of economics and history in State University of South Dakota, 1890–91. University extension lecturer in economics for University of Wisconsin, 1892–93. Appointed to professorship of economics and history in Drexel Institute, Philadelphia, in 1893. Received degree of Ph.D. from Johns Hopkins University in 1896. Most important publication is a monograph on "The Street Railway System of Philadelphia," published by the Johns Hopkins University in 1896.

Colonel JOHN I. ROGERS.—Born in 1844 in the City of Philadelphia. Graduated in 1861 from the Central High School. Five years later received degree of Master of Arts. Studied law with Charles Ingersoll and at the University of Pennsylvania. Was

admitted to the bar in 1865, and soon secured a lucrative practice in real estate and corporation law. Is chief counsel of the Building Association League of Pennsylvania and has conducted all its important litigation and initiated all modern legislation on the subject. In January, 1888, was appointed Judge Advocate-General of Pennsylvania and re-appointed by two subsequent administrations, holding the office nearly eleven years. Resigned in October, 1898, and was transferred at his request to the honorary roll of retired officers. Was elected member of the House of Representatives in 1881. Has been a prominent advocate of municipal reform and was one of the founders of the Democratic Committee of Thirty-one that co-operated so effectively with the famous Committee of One Hundred in the election of Mayor King and Receiver of Taxes John Hunter in 1881. Has recently distinguished himself by his opposition to the lease of the Philadelphia Gas Works to the United Gas Improvement Company. His mastery of the subject and unanswerable figures created a sensation in the Council Chamber, when he addressed the Committee having the lease in charge.

GUSTAVUS A. WEBER.—Born in St. Louis, Mo., August 8, 1868. Educated in the public schools of that city. In 1881 enlisted in the U. S. Signal Service (Weather Bureau), and three years later was promoted to observer in charge of the St. Louis, Mo., office. While stationed in St. Louis, was associated with Prof. Francis E. Nipher, of Washington University of that city, assisting him in the work of the Missouri Weather Service. In 1889 secured his discharge from the Signal Service to accept an appointment as Special Agent of the U. S. Department of Labor. Soon after his appointment was sent to Europe, where he remained about three years, making investigations for the Department. During a portion of the time spent abroad, assisted Dr. E. R. L. Gould in his investigation of the housing of the working people, and later took part in the preparation of Dr. Gould's report on that subject. Is now connected with the Washington office of the U. S. Department of Labor.

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